

September, 1955

The American School Board Journal



A PERIODICAL OF
SCHOOL ADMINISTRATION

In This Issue:

★ Quiet Man on the School Board — *Springer*

★ Vocational Choice and Industrial Democracy — *Punke*

★ Teachers Work in Industry — *Van Nostrand*

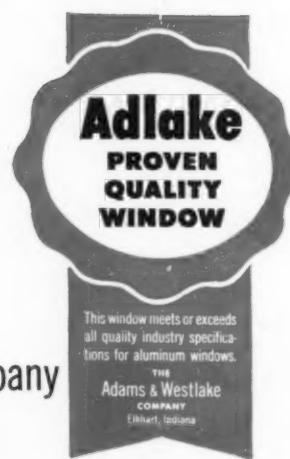
★ The Board and After-Class Assignments — *Roach*

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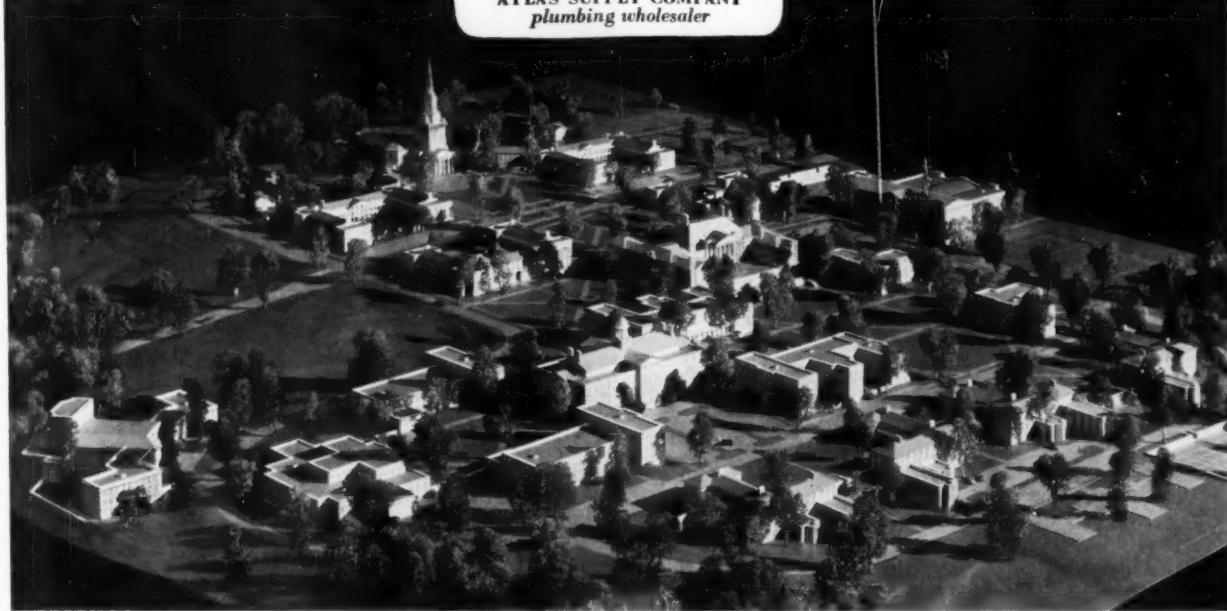
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pleted are University Center (*upper right*), Library (*upper left*), Chapel and Christian Education, Science and Research, Law, Gymnasium, 6 Dormitories, 10 Faculty Family Apartment Buildings, Power and Central Heating Plant. All buildings will be of colonial design with skillfully planned interiors and inbuilt equipment of the highest rank. All will be equipped throughout with world-famous SLOAN *Flush VALVES*.

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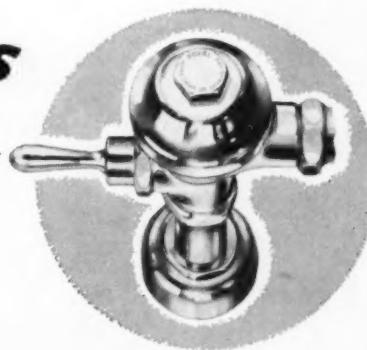
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SCHOOL BOARD JOURNAL for SEPTEMBER, 1955

FOR QUICK, EASY, SAFE OPENING WINDOWS

THE AMERICAN
School Board Journal
A Periodical of School Administration

September
1955

VOL. 131

NO. 3

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* Geoffrey Baker and Bruno Funaro in "Windows in Modern Architecture"

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Work-Type Study Conferences Used to Advantage by School Boards Associations

EDWARD M. TUTTLE

Time was, not so many years ago, that meetings of school board members, scheduled by their associations, followed the usual pattern of a full program of speeches with little opportunity for audience participation. Those on the receiving end felt more or less repaid for attending, depending on the quality and appropriateness of the speeches they heard. But they always went away with a lot of unanswered questions and a feeling that they, too, could have contributed something of value from their own experience had they been given a chance.

Program planners are now scheduling fewer speeches and are providing time for discussion periods of various kinds. Sometimes these take the form of panels of "experts" who discuss selected topics among themselves in front of the audience, and then invite questions and comments from the audience in whatever time remains. Too often, just when real interest and general participation begin to develop, the time runs out and again there is a lot of audience frustration. Much depends on the skill of the chairman, or moderator, in holding both the panel and audience to brief, pointed comments, clearly related to the subject of the discussion. Long-winded, rambling remarks and the airing of personal problems or experiences having no general interest can ruin a discussion period.

Still more effective is the true workshop or study-type conference where most of the time is spent in small discussion groups with *everyone* participating. Usually it is essential to provide a certain amount of factual information as a basis for profitable discussion. This can be given in an opening presentation by a recognized authority, or it can be furnished in printed form in advance of the conference. In any case, each group of 10 to 20 persons needs a capable chairman and a good recorder who can summarize and report the outcomes of the discussion. Another helpful arrangement is to include in each group a consultant or two having experience in the subject under discussion, provided the consultants are wise enough not to dominate the discussion. Sometimes an observer is added to the group to watch for outstanding developments and to advise, with the chairman, the conduct and progress of the discussion in order that it may be of greatest benefit to all.

Area, or Regional, Meetings

The discussion-type conference seems to be particularly effective for meetings with-

in a state where school board members from a comparatively small area are brought together for a few hours or a day. If careful advance planning is done to select topics for discussion which the members themselves have indicated they are most interested in, and if leaders are chosen for their ability to put a small group quickly at ease and to encourage participation by everyone, a profitable experience will result.

More and more state association leaders are finding that a series of such meetings held over a period of several weeks does more than any other activity to build interest and to assist local district boards. Following is a list of a few of the topics that have actually been scheduled at such meetings:

- Policies, Procedures, and Records of School Boards
- How New School Board Members Can Best Learn Their Job
- Qualifications of a School Administrator
- Relations Between the School Board, the Administrator, and the Staff
- Building a Salary Schedule
- What Can Be Done to Improve Teaching Standards
- How Can "Dropouts" From High School Be Reduced
- Problems of School Transportation
- The Proper Balance of Extracurricular Activities (including athletics)
- Opportunities for Adult Education
- Making the School Budget
- State Aid — How Much and How Administered
- Are Assessment and Taxing Procedures Equitable
- What Kind of Insurance Program Is Needed for Adequate Protection
- How to Go About Making a Local Survey of Building Needs
- New Trends in Building Materials and Designs
- Problems of School Plant Maintenance
- Relations Between the School Board and the Public, including Press, Radio, and TV
- Working With Citizens Advisory Committees
- What Makes a Good School Board Member

A few states are conducting real workshop meetings on a state-wide basis in addition to their annual conventions. Indiana is one of these where, for the past five years, such a two-day workshop has been held, locating it each year in a different part of the state at one of the institutions of higher education. This workshop is primarily designed to help newly selected board members, a large majority of whom attend, but there is always a considerable number of older board members present

WELCOME CRITICS

He has the right to criticize who has the heart to help.

— ABRAHAM LINCOLN

It is easy to criticize. All of us do too much of it, usually with little real understanding of the things we criticize, and with no intention of making any effort ourselves to help improve matters. Such criticism does more harm than good, and Mr. Lincoln implies that we have no right to indulge in it. On the other hand, men's efforts never reach perfection. Those responsible for a task are too close to it, too deeply involved in it, to be able to see its strengths and weaknesses accurately. Competent outside observers, motivated by "the heart to help," can often make constructive suggestions. Right now, especially, those responsible for the operation of our public schools need to encourage and welcome this kind of criticism from citizens of good will. — E. M. T.

who find the experience profitable year after year.

On the national level several regional meetings of state association leaders have been scheduled in recent years. Two of them, held this past summer, are described.

The Southeast Regional

During the week of June 6, the Second Regional Conference of Southeastern State School Boards Association leaders was held at Daytona Beach, Fla. Twenty-three school board members and executive secretaries representing school boards associations in eight of the ten southeastern states met together for six days. The conference was also attended by a number of interested educators and laymen including O. H. Roberts, Jr., president of the National School Boards Association; Maurice E. Stapley, director of the project on Community Conferences on Education; Cecil Hartung and Maurice Bement of the National Citizens Commission for the Public Schools; Truman W. Pierce and Bennie Carmichael of George Peabody College, Nashville, Tenn.; and others.

The conference was materially assisted by the sponsorship of the Southern States Cooperative Program in Educational Administration centered at Peabody College which completely subsidized the first such conference in 1954 and which contributed substantially again this year, although the several state associations bore part of the expense of sending their representatives. In years to come, the states will assume the major responsibility for continuing the conference.

After appropriate introductions — a review of the 1954 conference and progress reports from each of the state associations represented — a program of work was adopted covering three major topics for discussion on successive days:

1. How can state associations help local

(Continued on page 8)

STUFFY CLASSROOMS make your students dull and sluggish—and naturally cut down "take home" learning.

That's why it's so essential to have proper temperature and ventilation control *at all times!*

Student reactions will vary widely—depending on the time of day, the type of class, and the method of instruction. But the new Honeywell Schoolmaster Temperature Control System assures the proper conditions for classroom alertness throughout the day.

**Stuffy
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make him
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and cut his
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This new Schoolmaster System is a highly productive unit. It includes a newly developed school thermostat for each classroom, plus an indicator panel for the principal's office which gives a finger tip report on all room temperatures.

With this system, you can accurately coordinate level temperatures, proper humidity and ventilation to create ideal conditions for brighter classes, and better learning.

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New Honeywell Schoolmaster System makes temperature and ventilation control a "productive" item



A thermostat in each room makes temperature and ventilation control a part of teaching. The Honeywell individual classroom thermostat is custom designed for the instructor so that room temperature and ventilation can be matched to class activities.

An indicator panel gives the principal a finger tip report. The panel shown here is for the principal's office and is wired to a special sensing element in the thermostat for each room. The principal can have a push-button temperature reading for any room in the school.



Special sensing elements provide added fire safety. You have a constant fire sentry in the Honeywell Schoolmaster System, in addition to your regular fire protection system. You have fire sensing elements in each room, and in closets and store rooms, if you wish. These elements are wired to the principal's panel to help detect fires.



MINNEAPOLIS **Honeywell**

School Temperature Controls

112 OFFICES ACROSS THE NATION



WORK-STUDY CONFERENCES

(Continued from page 5)

school board members develop a better understanding and practice of ethical behavior in performing the delegated duties and responsibilities as public representatives in school affairs?

2. How can state associations help school boards gain prestige which, in turn, contributes to the prestige of the state association?

3. How can state associations help local school boards develop or improve working relationships with citizen groups?

It will be observed that the emphasis throughout was on the services that state associations can render to their member boards in the local districts. This, after all, as we have repeated so often, is the major purpose and function of a school board association. During the discussions, many practical suggestions were made and exchanged and these were embodied in a report prepared and distributed to the participants and all state associations in the Southeastern Region. An informal organization for planning a similar conference in 1956 was set up. The planning group comprises W. S. McMichael of Georgia, chairman, Mrs. Mary K. Cooley of Virginia, vice-chairman, and Ed. Henderson of Florida, secretary.

The Midwest Regional

For the fourth consecutive year, school board association leaders from the mid-western states met together July 22-24 to discuss problems of mutual concern. The meeting this year was held at the Kellogg Center at Michigan State College, East Lansing, Mich. Eleven states were represented by about 30 leaders. Previous meetings had been held at the University of Chicago (1952 and 1953), and at Des Moines, Iowa (1954). This movement started with a full subsidy from the Midwest Center of the C.P.E.A. at Chicago, which was reduced to one half, then to one quarter, and this year all expenses were borne by the states themselves. It was agreed that next year's meeting will be held in Indiana, and that of 1957 in South Dakota.

Sessions were devoted to state associations' problems of finance and services, and to co-operative efforts in stimulating Community Conferences on Education and other N.S.B.A. projects. One whole day was given over to a discussion of school district reorganization which is the most critical and controversial problem in the Midwest Region. As a basis for the discussion, background information was supplied by two national authorities in this field—Dr. Howard Dawson, executive-secretary, Department of Rural Education, N.E.A., and Dr. Tom James, assistant director,

Midwest Administration Center, University of Chicago. Out of the discussion came an informal resolution which was unanimously adopted. It was addressed "To all State Executive Officers and State Legislators," and read as follows:

WHEREAS, the 12 Midwest States have 65% of the nation's school districts, and

WHEREAS, we have many school districts that are not providing an adequate educational program, and

WHEREAS, there are thousands of school districts in the Midwest Region that are not even operating a school but which still levy and receive monies as governmental subdivisions, and

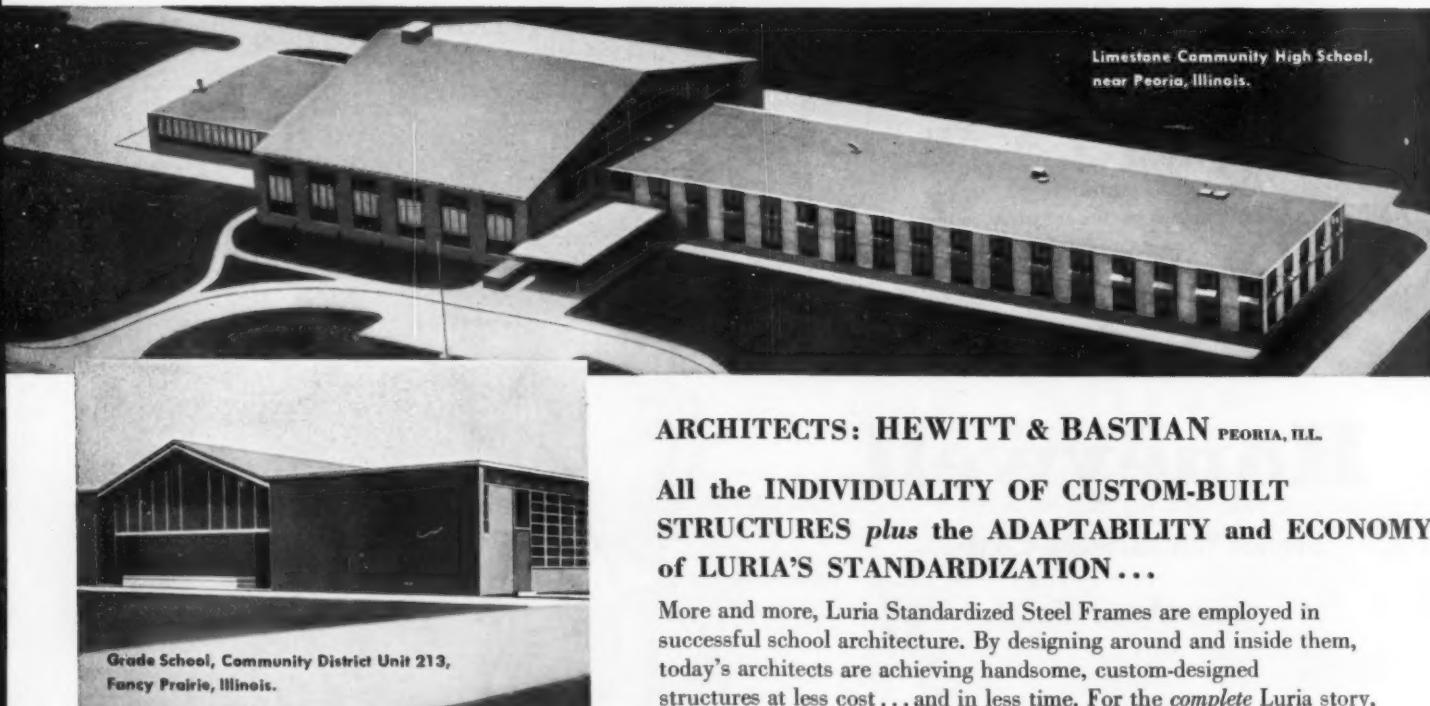
WHEREAS, the efforts of the public schools to provide a good educational program are handicapped by problems of increased enrollment, lack of finances, and shortage of qualified teachers, and

WHEREAS, our nation's social, cultural, and economic life demands the highest quality of public education that it is possible to provide;

THEREFORE BE IT RESOLVED, that we, the representatives of state school boards associations in the Midwest Region of the National School Boards Association, respectfully solicit the attention of the Executive Officers and Legislators of our state governments to the waste of state and local tax dollars in perpetuating many ineffective school districts. Further, that we urge the state legislatures of each state in this Midwest Region to enact legislation encouraging the development of effective school districts.

(Concluded on page 94)

SCHOOL ARCHITECTURE and LURIA Steel Buildings



Limestone Community High School,
near Peoria, Illinois.

Grade School, Community District Unit 213,
Fancy Prairie, Illinois.

ARCHITECTS: HEWITT & BASTIAN PEORIA, ILL.

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flexible lighting system
to meet all the
needs of modern
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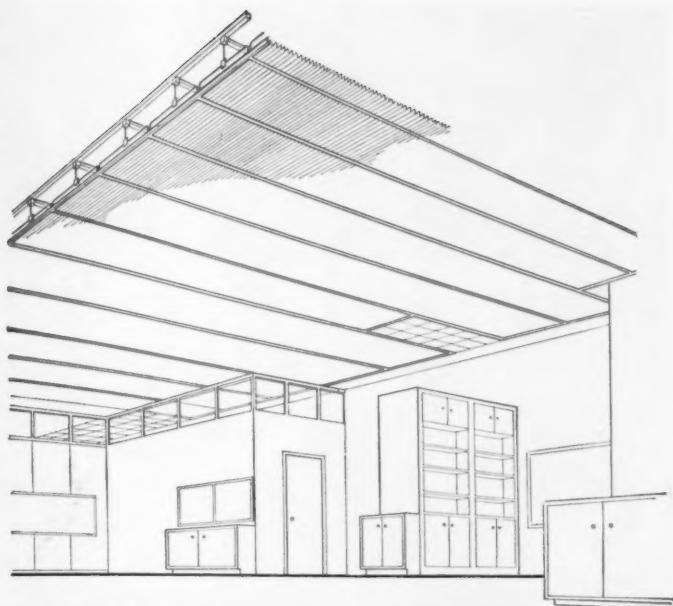
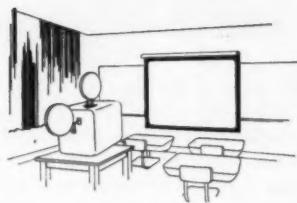


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NO SIDE WALL CONTACT. Unlike standard luminous ceilings, Wakefield Photo-Metrics can be up to 30 inches from the side walls without affecting the light-distribution pattern. This saves the cost of exact fitting of diffusers and grids to walls, to structural members or to special equipment.

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SELECTIVE SWITCHING FOR AUDIO-VISUAL. "Dim-outs" rather than black-outs are needed for classroom projection. To reduce room brightness to screen brightness, you need large area, diffuse light sources such as Wakefield Photo-Metrics, which through selective switching can lower the quantity of light without altering its over-all distribution pattern.

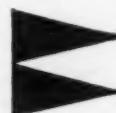
WAKEFIELD PHOTO-METRICS

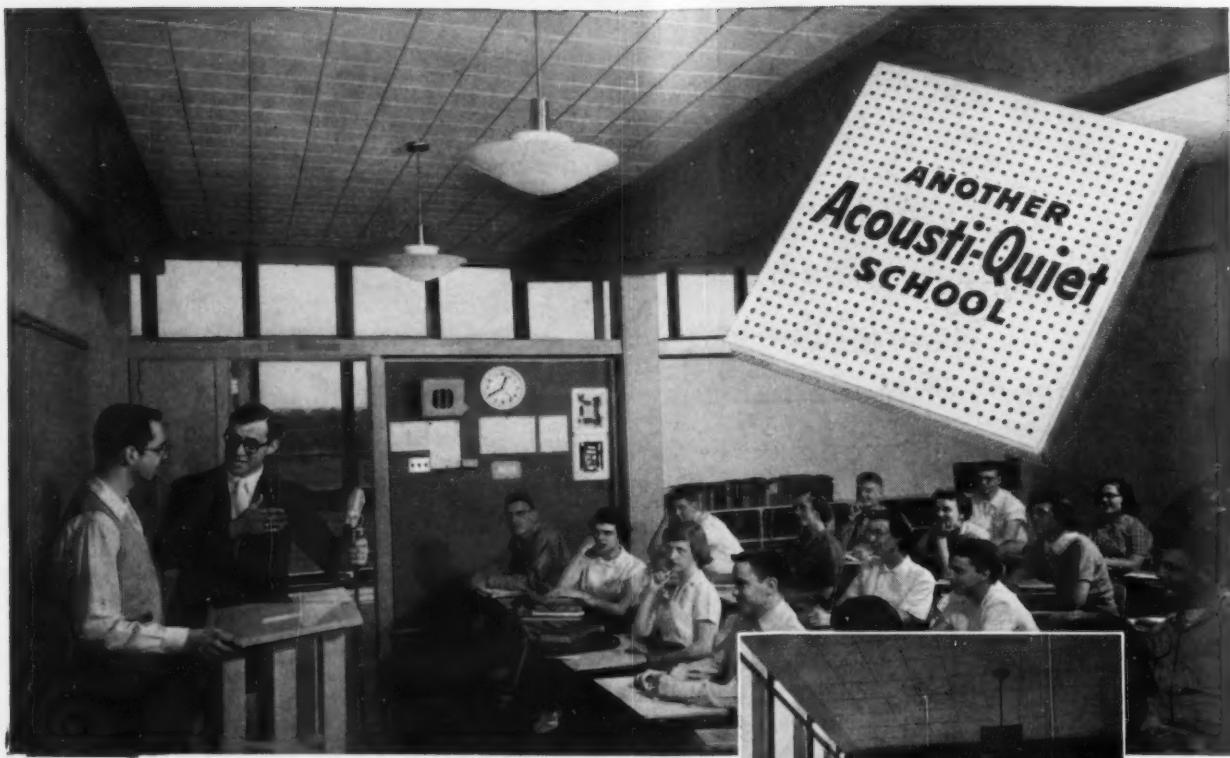
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Told here are several of the basic advantages of Wakefield Photo-Metrics for modern classroom planning. Many others are described and illustrated in our new 40-page booklet called, WAKEFIELD LIGHTING: AS FLEXIBLE AS YOUR CLASSROOMS. Write for one to The Wakefield Company, Vermilion, Ohio. In Canada: Wakefield Lighting Limited, London, Ontario.

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 Architect: Perkins & Will, Chicago
 General Contractor: Lovejoy Construction Co.
 Acoustical Contractor: Acousti-Celotex Division, Perma-Stone, Des Moines, Ia.

QUIET goes to school in Keokuk



And another Iowa school scores in the battle against noise, one of learning's most annoying obstacles. Today, thanks to Acousti-Celotex Sound Conditioning, the Keokuk Senior High School enjoys an atmosphere of study-aiding quiet throughout.

Better Lighting, too!—Ably controlling the reverberating spread of noise throughout the building, the Acousti-Celotex ceiling helped permit open corridor-classroom design illustrated, for valuable bi-lateral natural lighting to all rooms.

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Says John W. Conrad, Keokuk's Superintendent of Building and Grounds: "We have in our school system eight buildings acoustically treated. Our first application was made in 1947, the results of which prompted our Board of Directors to approve acoustical treatment in our yearly plan of modernization."

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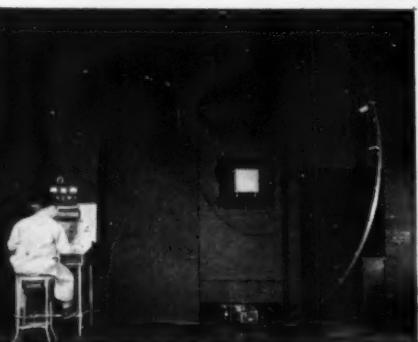
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Owens-Illinois' NEW SOLAR SELECTING Glass Block cooler in hot weather

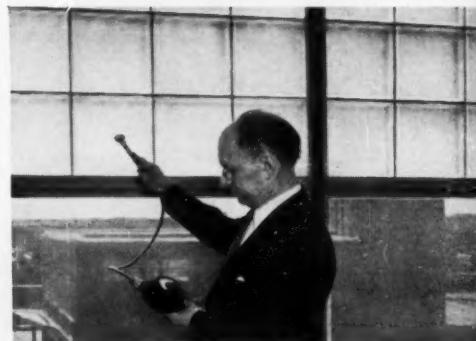
Owens-Illinois new solar selecting Glass Block No. 80-F has a lower surface temperature during hot weather. It acts like a mirror reflecting a good portion of the direct hot rays from the sun, and at the same time transmits cool light reflected from the ground.



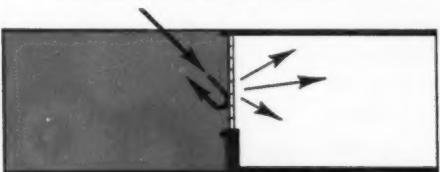
Because of its light-selecting principles this new block has a much lower surface brightness than other glass block. Maximum surface brightness as measured at the Daylighting Laboratory is less than 1400 foot-lamberts.



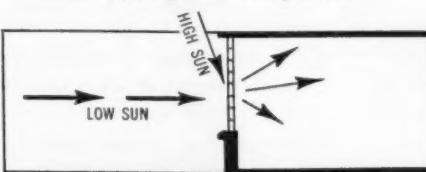
Thermocouples applied to the face of the 80-F block during hot weather (outside temperature 90°) showed that the roomside surface temperature was 14 degrees less than a conventional type light-directing block.



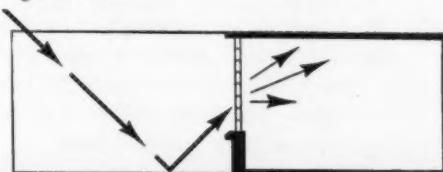
A similar test using a portable pyrometer confirmed the findings of the test using thermocouples by showing the same 14 degrees lower temperature on the roomside surface of the 80-F glass block.



Rejects hot summer sun—This diagram shows how the 80-F block reflects a major portion of the light from the sun at the critical 45° angle thus reducing brightness and solar heat transmission during hot weather.



Uniform light transmission—Prismatic design is selective and controls the amount of light transmitted from the various sun positions, thereby providing more uniform light transmission all day long.



Transmits ground-reflected light—This diagram shows how the 80-F transmits the cool light reflected from the ground. This feature is especially important when the sun is not on the fenestration.

Complete
Information available

Send for the free, technical bulletin that gives the details. Just write "No. 480F" on your letterhead and mail to Kimble Glass Company, subsidiary of Owens-Illinois, Dept. AS-9, Box 1035, Toledo 1, Ohio.

OWENS-ILLINOIS GLASS BLOCK
AN  PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO



When there is more "out there"



in here, the kids are happier

Nothing frustrates a youngster faster than being shut in. All he can think about is getting out.

That's why you see Daylight Walls with their clear glass from wall to wall and sill to ceiling in so many new schools.

They cut costs, too. Artificial lighting isn't needed so much. There's less wall area to paint and maintain. Even construction costs are lower. In cold climates, your Daylight Walls should be *Thermopane** insulating glass

for the greatest comfort and heating economy. For more product information, call your local Libbey · Owens · Ford Glass Distributor or Dealer (listed under "Glass" in the yellow pages of your phone book).



Write today for this free book. Complete information and illustrations on school daylighting. Dept. 4095, Libbey · Owens · Ford Glass Company, 608 Madison Ave., Toledo 3, Ohio.

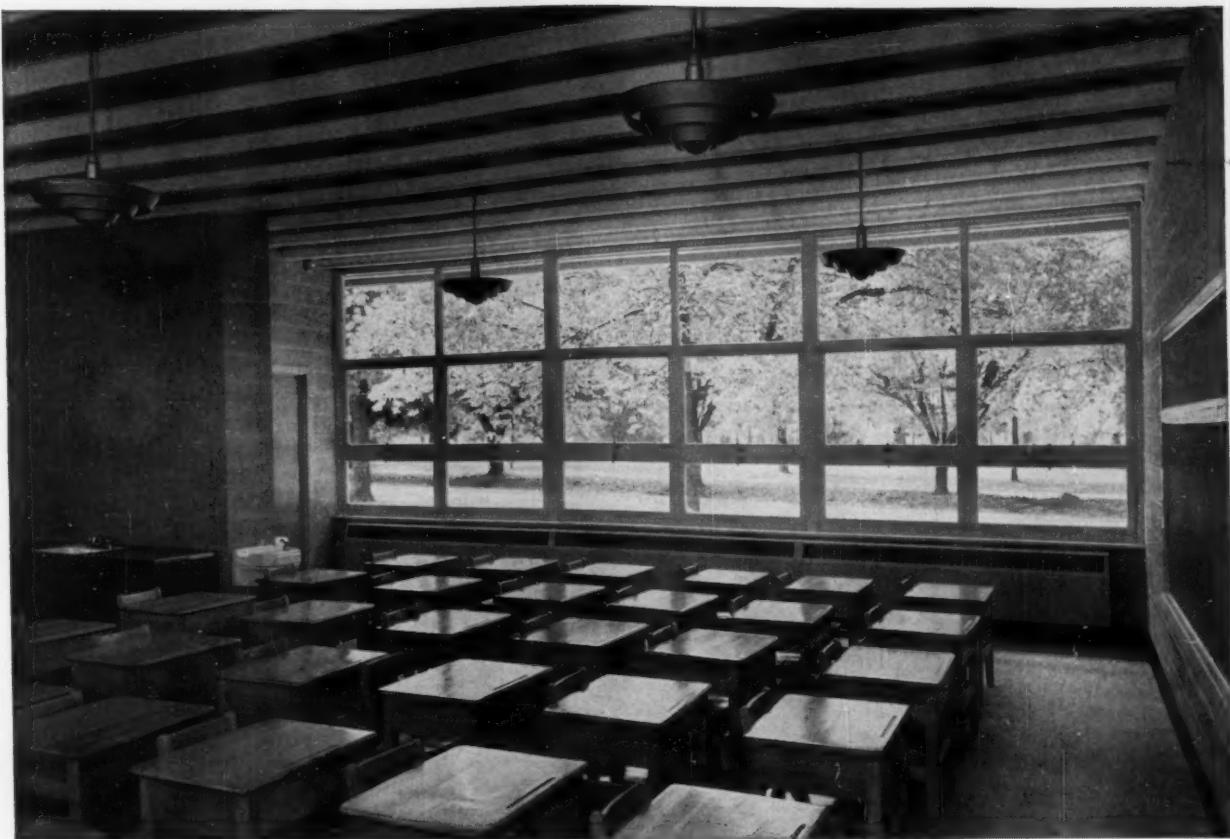
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DAYLIGHT WALLS

... THAT LET YOU SEE

LIBBEY · OWENS · FORD GLASS CO., TOLEDO, OHIO



Schools by Page & Smith Use Webster Tru-Perimeter Heating

Wakelon Public School is typical of the modern, low cost schools in North Carolina designed by Page & Smith, Raleigh, and using Webster Steam Heating Equipment.

Examine this pleasing interior. Note the wall-to-wall installation of Webster Walvector blanketing the entire window area and concealing all piping. Tru-Perimeter Heating with Webster Walvector spreads gentle, even heat along cold perimeter walls — offsets heat loss beneath windows — provides draft-free comfort with window ventilation.

Wakelon School has 12,914 sq. ft. of floor space, 6 rooms and cafeteria, built in 1952 at a total cost of \$127,000. Heating contract was \$11,585 or 9 per cent of the total construction cost.

Webster Tru-Perimeter Heating for Schools uses Webster Walvector to replace the heat at the perimeter where heat loss occurs. Heating elements mounted close to the floor spread heat the entire length of exposed walls, warm the air in the room, the floors, and the inside surface of outside walls. Gently moving warmed air is

drawn to floor level and across the floor into the inlet opening of the radiation.

Webster Tru-Perimeter Heating results can be obtained with either forced hot water or Webster Moderator controlled low-pressure steam heating which varies heating automatically with outdoor temperature. Steam circulation is facilitated with Webster Traps and Valves. The rugged single unit Webster Moderator Control involves minimum maintenance cost — no blowers or fans, no buried piping, no useful floor space taken.

Look into Webster Tru-Perimeter Heating for your school. Call the Webster representative or write us.

Address Dept. AS-9

WARREN WEBSTER & COMPANY
Camden 5, N. J., Representatives in Principal U. S. Cities
In Canada, Darling Brothers, Limited, Montreal

Webster
WALVECTOR
REG. U. S. PAT. OFF.
For Steam or Hot Water Heating

CLARIN CHAIRS ARE MADE OF STEEL...



FOR COMFORT

- Flat wood seats tend to conform to a wide degree of varying body widths at any seated position.
- Wood seats have a "neutral" temperature . . . won't conduct away body heat or feel alarmingly cold.
- Whether upholstered or not, wood seats are physiologically "softer" than steel, formed or flat.

FOR DURABILITY

- Five-ply hard wood seats in all Clarin folding chairs are, like permanent seating, innately strong . . . never dent or bend.
- Edges of Clarin wood seats are completely enclosed by steel rim housing for support and protection.
- Clarin wood seats are finished on both sides . . . they are easily removed and turned over for a "factory fresh" surface after years of use.

QUALITY IS THE ONLY TRUE ECONOMY... AND



QUALITY

SHADOWLESS LIGHTING-BY GUTH GRATELITE*

...EXCEPT FOR THE SEAT*

Wood seats in quality folding chairs are there for some very good reasons: for comfort, for durability and for health's sake. You'll find wood seats in every CLARIN chair because thirty years experience in building quality folding chairs has taught that there is no substitute. Proof of the exceptional durability is the fact that CLARIN guarantees the seat for *the life of the chair!* Here, then, is just one more reason why you should choose CLARIN for all your auxiliary seating requirements. Write today for *free* copy of our complete four-color catalog.

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4640 West Harrison Street
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Illustrated is Clarin No. 2317-W ...
one of 65 individual models in the only complete
line of folding chairs. You'll find a Clarin
chair just right for your purpose.

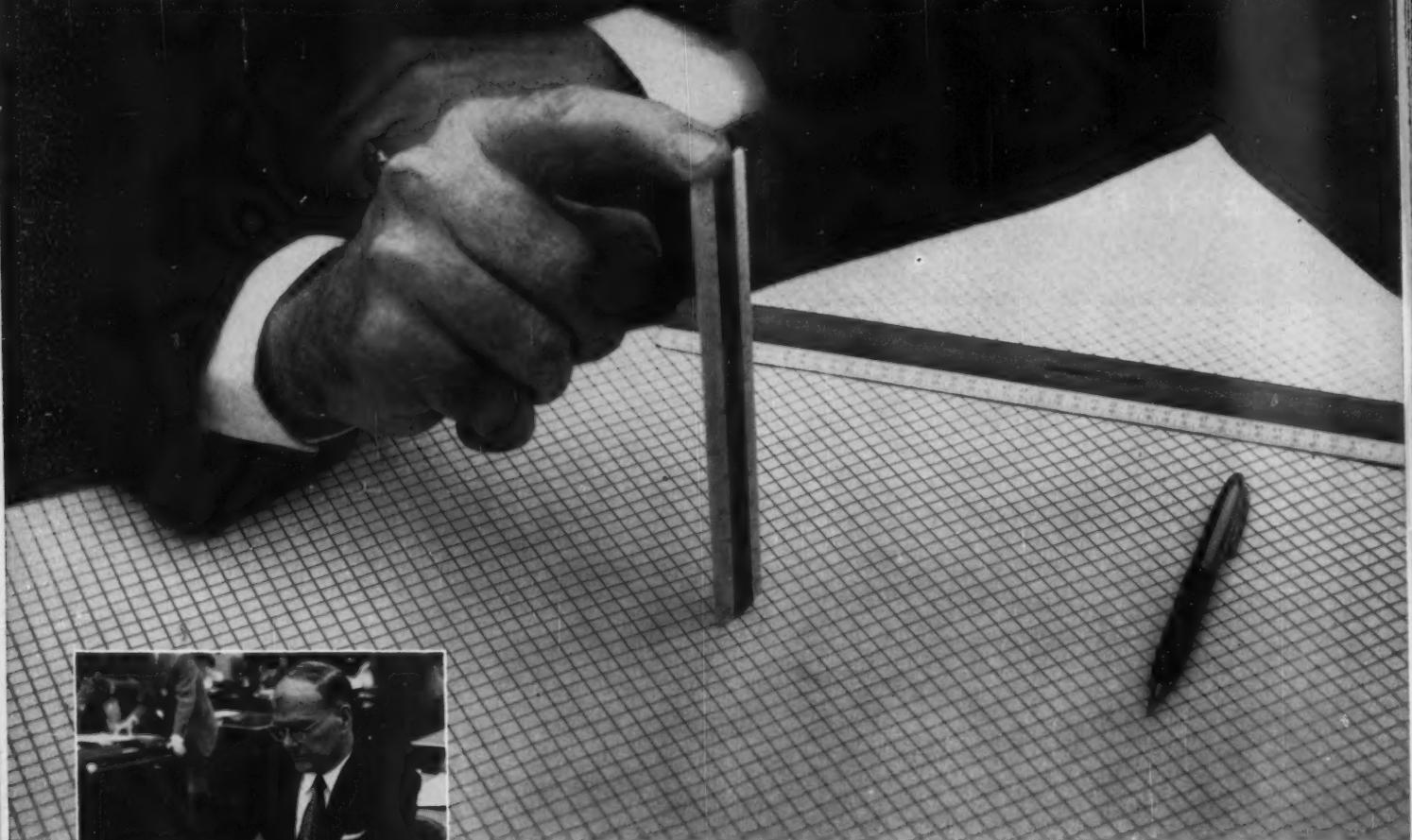


SETS NEW STANDARDS FOR SEATING

TEN YEAR GUARANTEE STAMPED IN STEEL

With complete confidence in the inherent quality of *Clarin* chairs, plus our 30 years of specialized product "know how", we take pride in issuing an unrivaled *10-year Guarantee* with every chair sold. The tangible sign of long-term economy is the date stamped in one leg of each *Clarin* chair. It is permanent assurance to all that you purchased the best.

SHADOWLESS LIGHTING - BY GUTH GRATELITE*



"THE GREATEST LIGHTING-IN-ACTION TEST EVER MADE!" (PHOTO NOT RETOUCHED)

... it shows why the Martin Company of Baltimore chose Guth GrateLite Ceilings as "the best possible lighting" for their new 70,000 sq. ft. Engineering Building:

65 foot-candles without shadows from drafting instruments or hands.
No sight fatigue after close, accurate work with fine details.

The entire ceiling glows with seemingly sourceless light... softly diffused, low brightness light... glare-free and evenly distributed.

PLUS AN AIR-CONDITIONING BONUS!

The $\frac{3}{8}$ " grids help diffuse the conditioned air and distribute it evenly over the entire work area without drafts.

WRITE ON YOUR LETTERHEAD FOR DETAILED GRATELITE INFORMATION.



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trusted

NAME IN LIGHTING SINCE 1903



ST. LOUIS 3, MO.

*TM REG. U. S. & CAN. PATS. PEND.



Sherman Elementary School, Tacoma, Washington
Architect: Robert B. Price—Contractor: Ostruske-Murphy, Inc.

Sherman Elementary School's steel panel ceilings have the acoustical treatment built right in!

Some architects have discovered the way to control school noise and save money doing it . . . by using long-span Fenestra* Acoustical-Structural Building Panels.

This remarkable multi-purpose building product combines the finished interior ceiling with a structural roof deck system, *plus* a noncombustible acoustical element built right into the panels. No acoustical material has to be pasted on the ceiling surface . . . just paint it. And the ceiling can be washed or repainted whenever needed without affecting the acoustical efficiency!

Cost? Both time and money are saved because Fenestra Panels replace separate roof deck and framing and eliminate the extra labor usually needed for acoustical treatment and plaster. The panels go up fast, and are ready for finish roofing as soon as they are in place and interlocked. Foundation and structural steel costs are also reduced.

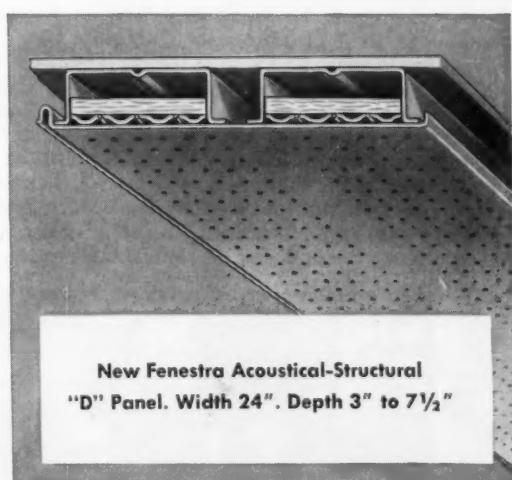
Why not find out how Fenestra Acoustical-Structural Building Panels can be used in your next school building? Mail the coupon below for your copy of the new brochure—*Fenestra for Schools*—or call your Fenestra Representative.

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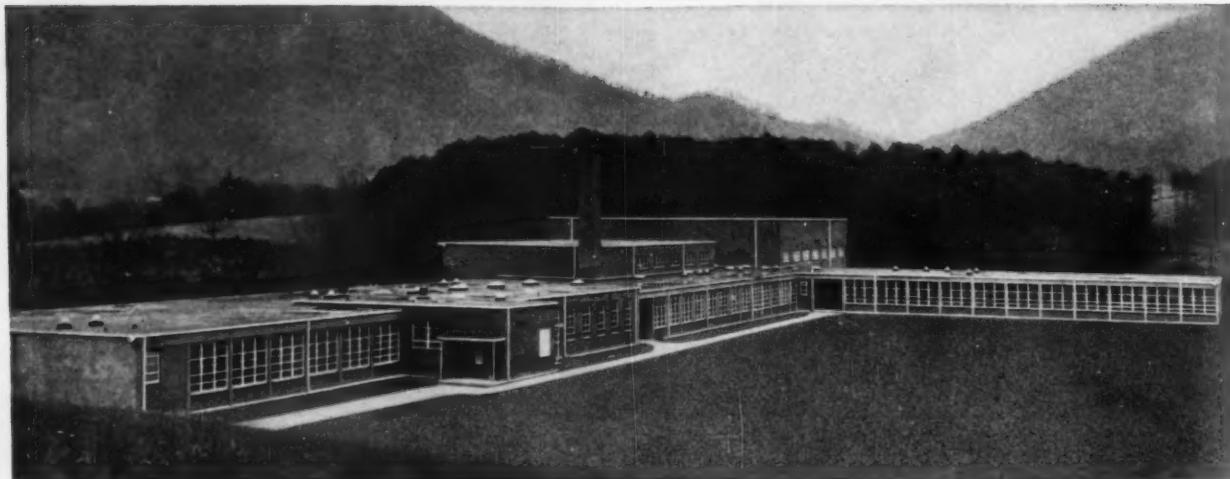


New Fenestra Acoustical-Structural
"D" Panel. Width 24". Depth 3" to 7½"

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Please send immediately my copy of <i>Fenestra for Schools</i> .	
NAME	
STREET	
CITY	STATE
COUNTY	ZONE

Fenestra for Schools booklet cover image.

N. Carolina School Board Specifies Combustioneer Stokers In New 5-Building, \$3,235,000 Program!



Buncombe County School Board bases choice on Combustioneer's patented respirator, extended worm gear features, low initial cost.

In the past 25 weeks, five of the most modern, up-to-date school buildings to be found anywhere in the nation have opened their gleaming doors to more than 3,000 students in Buncombe County, North Carolina. Over \$3,235,000 have gone into this new building program . . . with the school board, the architects and the builders working hand in hand . . . assuring each voter that every tax dollar is getting a full 100c worth of school.

A. C. Reynolds High School (*above*), located in Biltmore, is certainly one of the most beautiful of all. Designed by the firm of Lindsey Madison Gudger, Asheville architects, the building boasts of 72,000 square feet

of functional floor area—and was "delivered" to the school board early in 1955.

All five of these new Buncombe County school buildings are heated with the latest model Combustioneer Bin-Feed Stokers!

Combustioneer Stokers were the natural selection. Exclusive, patented features contained only in Combustioneer Stokers provide the most even, constant, superbly economical heating systems available. The *Agitating Transmission*, for instance, keeps the fire-bed open and free-burning. The famous Combustioneer *Automatic Respirator* controls the air delivery for maximum combustion and smoke-free stacks. (Heating engineers are overwhelmingly enthusiastic about these two exclusive Combustioneer features!)

There's a Combustioneer Hopper or Bin-Feed Stoker just right for any application—and they range in size from 9 to 1,000 lbs. per hour. So, for the very latest in economical heating, with savings up to 25% and more, write today for Combustioneer's new folder "The Buncombe County Story"—which gives factual data on these five new school buildings.



Shown are (right to left): Mr. T. C. Roberson, Superintendent of Buncombe County Schools; Mr. R. A. Tamberlin, Assistant, and Mr. Oliver Spencer, Jr., Combustioneer District Manager for North and South Carolina. Mr. Roberson gave four reasons for the board's selection of Combustioneer Stokers: (1) Price, (2) Extended Worm Gear, (3) Automatic Respirator, (4) Combustioneer's Performance.

COMBUSTIONEER DIVISION
THE STEEL PRODUCTS ENGINEERING COMPANY
1256 West Columbia Street, Springfield, Ohio



Combustioneer
LOW AND HIGH PRESSURE OIL BURNERS • GAS BURNERS
OIL, GAS, COAL FURNACES • STOKERS • HUMIDIFIERS

New-

REVOLUTIONARY SlatoSteel CHALKBOARD

BECKLEY-CARDY



Perfect writing surface
without glare
or reflection

•

Uses regular chalk

•

Erases clean

•

Can "double" as a
bulletin board

•

Fire resistant

Here's a revolutionary new kind of chalkboard. Tougher than porcelain — rugged as steel can make it.

SlatoSteel also brings the added advantages of "touch and feel" learning to the classroom when used with magnetized letters and figures. The magnetic feature also facilitates posting, as on a bulletin board. Check the other advantages below and you'll see why SlatoSteel, in every way, is a superior chalkboard.

- SMOOTHER WRITING. Chemically prepared silicate coating on substantial steel means a chalkboard that's easy to write on, easy to clean.
- EASIER TO SEE. The Litegreen color is permanent with a reflectance factor controlled to not over 20%. Writing shows up clearly, erases easily.
- MORE DURABLE. SlatoSteel has a patented "Porcenell" coating that produces a velvety, flint-hard surface. A special adhesive provides an absolute bond between the steel and the $\frac{1}{4}$ inch Preswood backing sheet.
- LESS EXPENSIVE. Because "Porcenell" requires only a 22 gauge steel base, it weighs only $2\frac{1}{2}$ lbs. per square foot. You save on transportation as well as installation costs.
- EASY TO INSTALL. SlatoSteel saves money on installation for it needs no expensive special grounds or wall construction. It can be sawed and drilled on the job, so can be put up by a workman with ordinary tools.



- SEE FOR YOURSELF how SlatoSteel will meet your needs best. Write for a testing sample and complete details.

Beckley-
Cardy

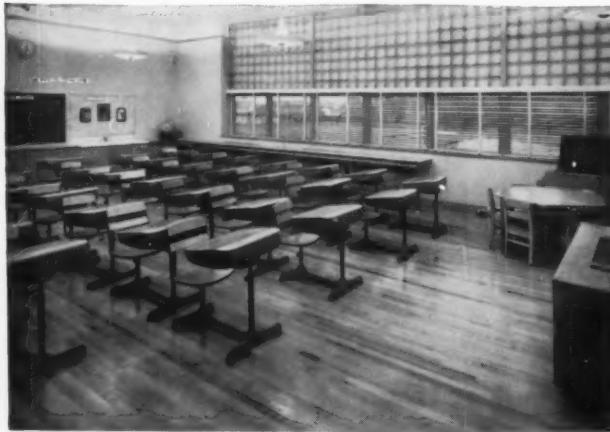
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CHICAGO 39, ILL.

NORTHERN HARD MAPLE



Philip Sheridan Elementary School, Tonawanda, N.Y. Architects: F. J. and W. A. Kidd, Buffalo



General Contractors: John W. Cowper, Inc., Buffalo. Floors by Lamkin & Birch Co., Buffalo



the finest floor that grows

Everything ABOUT IT ENDURES

...its resilience
its brightness
its tightness
its warmth
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its beauty of grain
its easy cleaning
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its smoothness
its dent-resistance

That's "the beauty of it!" As schoolmen the nation over know, a well-laid floor of Northern Hard Maple fights the scuffs and scars of generations of young feet. Its cheerful, comfortable qualities endure through years of the punishment all school floors must take. From gymnasium to office, maple flooring's bright, home-like tones and pleasant *resilience* help to put pupils and teachers at ease.

Important, too, is the fact that a sturdy maple floor adds a big factor of strength, of rigidity, to the building structure . . . something no mere floor covering contributes.

Both MFMA-graded and inspected Northern Hard Maple flooring and its fine companion woods, MFMA Northern Beech and Birch, are readily and widely available in strip, block and pattern flooring. Specify them with confidence.

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Arch. (12J-MA) for spec-
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FLOOR WITH *NORTHERN* HARD MAPLE
BEECH AND BIRCH

GIVE THEM *Glass* TO SEE BY AND THROUGH

Translucent Mississippi Glass Plus Vision Strip Creates Comfortable Classrooms

The Stephen C. Foster Elementary School, Gainesville, Fla., is an excellent example of the modern practice of combining wide areas of translucent glass for better daylighting with a vision strip of clear glass. Light diffusing glass throws daylight deep into rooms, minimizes harsh contrasts and sharp shadows that may fatigue young eyes and distract students. It floods work areas with comfortable, eye-easy, illumination. Youngsters work better, feel better, when they see better under controlled daylighting. And the vision strip of clear glass creates a friendly atmosphere that enables youngsters to see the outside world.

Glass by Mississippi has many applications in the modern school. For instance, this outstanding installation has Polished Wire Glass (Fire Retardant No. 32) in all exterior classroom doors for utmost protection plus visibility and illumination.

You can select from an extremely wide variety of patterns and surface finishes to solve any daylighting problem within any school building budget. Specify Mississippi. Available everywhere through leading distributors of quality glass.



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"Better Daylighting For Schools". Address Dept. 14.



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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



Only Trane KB* Unit Ventilators

no matter



A Trane Unit Ventilator with Kinetic Barrier* action operates every minute room is occupied... stops drafts, ventilates every corner uniformly, ends stale-air spots! And... it's whisper quiet!

Modern walls of glass have opened up the classroom... invited the sun and the light... and chilling downdrafts!

Yes, modern schools have actually *created* a problem: A steady stream of icy air flowing down along *walls of glass*, over the sill and into the classroom. Drafts that can annoy and chill, not just now and then, but *every minute* of the day.

Therefore, any system designed to stop this flow of cold air must operate,

not just now and then, but *every minute* the room is occupied.

TRANE—and *only* TRANE—has the Unit Ventilator that does this. TRANE's draft-stopping Kinetic Barrier action operates *full-time... even when the heat is off!*

Actually, the "blanketing" of windows during the *heating* cycle has been common practice for years. But this still leaves pupils exposed to downdrafts since *cooling* with outside air is required

about 75% of the time, even in winter. There must be a full-time draft barrier. And only TRANE has it!

What's more, since the special fans in this unit operate full-time, the air delivered from the wall-to-wall wing ducts is under *constant pressure* for truly *uniform* ventilation. Cold corners, stale-air spots—gone like that! And since these fans are *low-velocity* fans, they're actually *whisper quiet*!

For full details have your architect, engineer or contractor contact his nearby TRANE Sales Office, or write TRANE, La Crosse, Wis.

*Kinetic Barrier refers to the wall of continuously upward-moving air provided by TRANE KB Unit Ventilators. This action reverses window downdraft, induces flow of room air, blends it with main air stream from unit.

stop drafts all day long...

whether the units are heating, ventilating, or cooling!



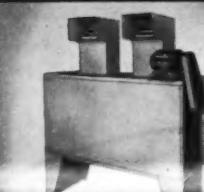
EVERY FEATURE FOR LOW MAINTENANCE, QUIETER OPERATION, LASTING BEAUTY!

- **Rubber dirt seal** on back of unit and felt pad under unit seal out dirt, prevent heat streaks.
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- **Resilient motor mounts** help stop noise, vibration—assure smooth operation.
- **Low velocity fans** are unusually quiet, deliver large quantities of air.
- **Baked on finish** is extremely resistant to scuffs, bumps and kicks. Always attractive.
- **Decorator styling** adds beauty to any room. Available in six colors or finished with prime coat.
- **Color-keyed tops** of standard gauge linoleum available in six colors. Pick up color scheme of room, blend with or complement TRANE standard finishes.

TRANE TORRIDOR delivers large volumes of heated air long distances, with or without ducts.

TRANE WALL LINE Convector bring draft-free heating to long wall and window runs.

MATCHED TRANE PRODUCTS for all your school heating and ventilating needs.



TRANE

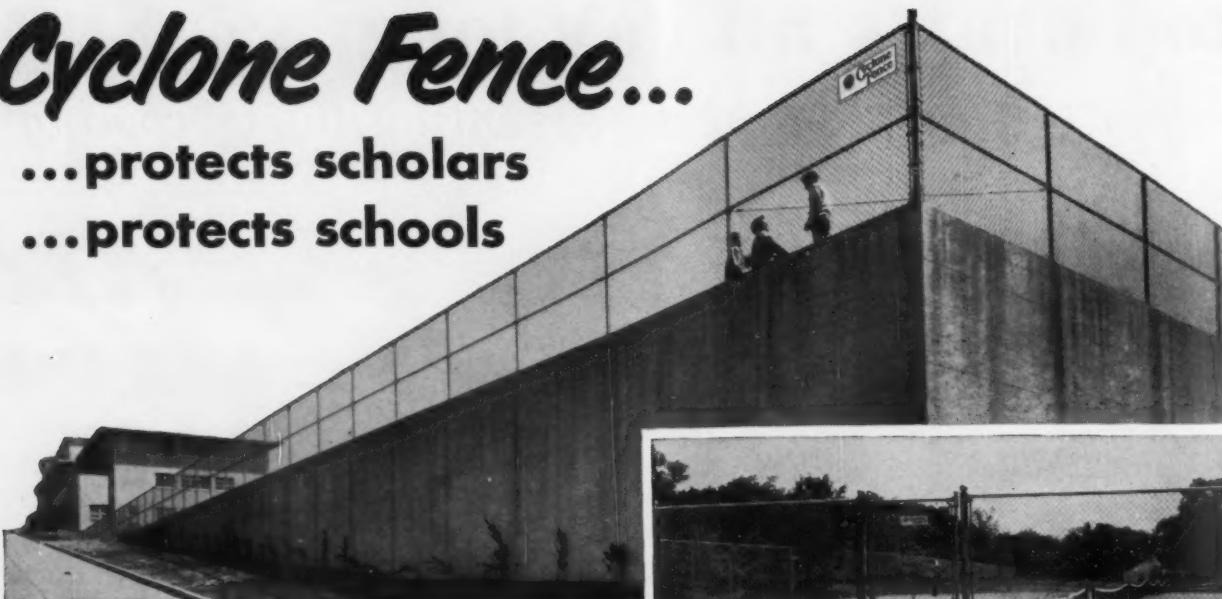
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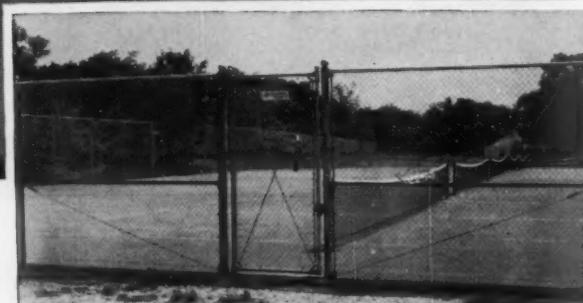
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Cyclone Fence...

...protects scholars
...protects schools



CYCLONE FENCE PROTECTS THE STUDENTS. Grade school children or high school football teams are equally well protected when at play behind that Cyclone Fence. This unusual installation shows how versatile Cyclone Fence can be. Here it not only encloses the athletic field but protects a too enthusiastic player from a nasty fall.



CYCLONE FENCE CREATES SPECIAL EQUIPMENT. A typical example of modern, school equipment is this multiple-set sized tennis court. Strong, good-looking Cyclone Chain Link Fabric is fabricated into Cyclone Tennis Court Enclosures . . . will take many years of battering by tennis balls without denting, chipping or other damage.



CYCLONE FENCE PROTECTS SCHOOL PROPERTY. Passers-by keep right on going by the school yard that's fenced with strong, sturdy Cyclone Fence. There's no possibility of short-cuts, no encouragement for vagrants to linger here. Cyclone Fence establishes the boundaries of the school property, gives a neat, finished look to the grounds.

**NO JOB IS TOO LARGE—
NO JOB IS TOO SMALL FOR CYCLONE***

*Cyclone is the trade-mark name of fence made only by Cyclone.
Accept no substitute.

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You can buy *cheaper fence* than Cyclone, but it will *cost you more per year*. Cyclone gives full value for your dollar. Nothing but brand-new, top-quality material is used throughout. Posts and top rails are heavy and rigid. Gates won't drag. The chain link fabric is woven from heavy steel wire and galvanized *after* weaving for greatest resistance to rust and corrosion. And Cyclone is erected by full-time, Cyclone-trained experts.

Our engineers, located in principal cities, will gladly supply you with data, and advice on your particular school fencing job. Write or phone for this free service.

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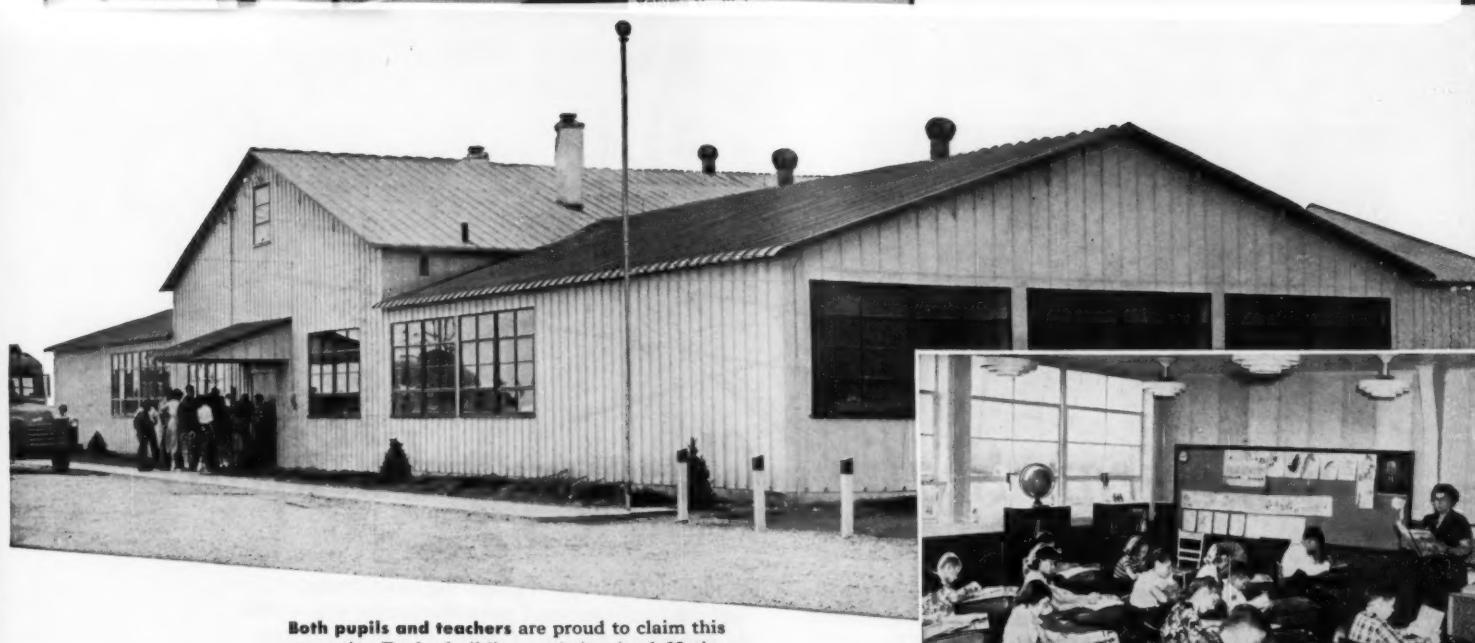
SEE THE UNITED STATES STEEL HOUR. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station.



U N I T E D S T A T E S S T E E L



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Ltd., Toronto • 90 U.S. and 15 Canadian Offices



Both pupils and teachers are proud to claim this attractive Butler building as their school. Notice the banks of windows that let in lots of fresh air, and flood the modern classrooms with light.

"With **BUTLER** buildings and plans we got both classrooms and a community center

for the price of one!"

Says Alfred Totel, President, Wallace Township School District, Ottawa, Illinois

"When attendance in our one-room schools fell below legal limits, we had two alternatives: (1) We could pay high transportation and tuition costs to a city school, (2) or we could consolidate our own schools. We preferred consolidation that would also provide a community center, but the cost threatened to send taxes sky high.

"Then we asked our nearby Butler dealer for plans and prices. We were pleasantly surprised to find that for the cost of classrooms of commonly used construction, we could erect a Butler steel building to provide these needed classrooms and the big community room we wanted besides!

"Even with a late spring start, our Butler building was ready for the fall school term. Parents, pupils and teachers were as pleased with the modern classrooms as property owners were with their big tax savings."



A dream comes true for Mr. Totel as he points out to Mr. Stakemiller and Mr. Phalen of the Mendota Building Service, how well their plans have worked out in practice.



There's always something going on in this big room that has become the community crossroads. It's dandy for clubs and other get-togethers—big enough for basketball games.

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Manufacturers of Oil Equipment • Steel Buildings
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Please send me the name of my nearest Butler building dealer, also more information on Butler buildings for school classrooms, auditoriums, garages and Yo-Ag manual training shops.

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School _____
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American Seating Classroom Furniture

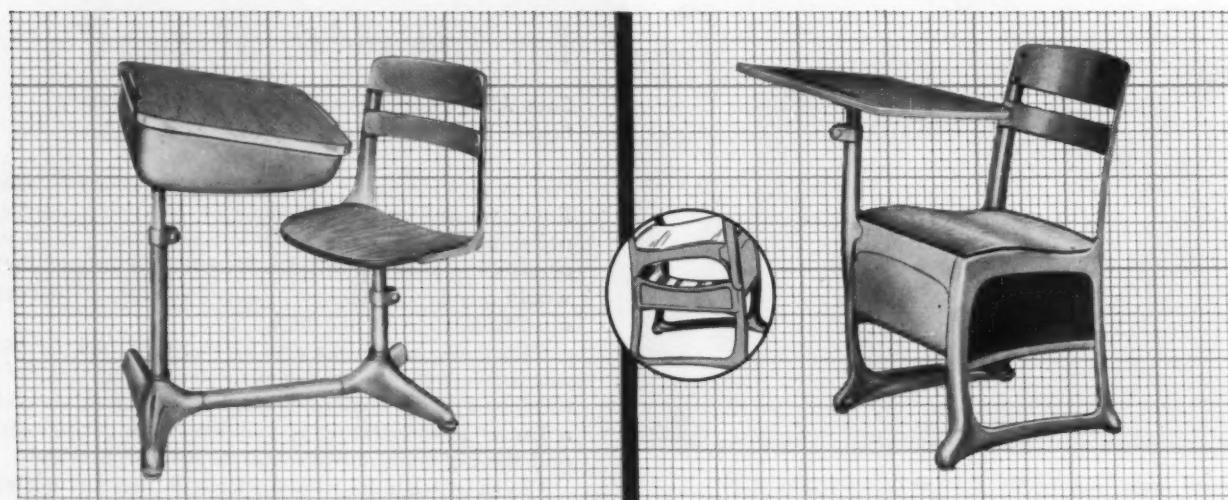
Many desks resemble the American Universal Desk; many chairs, chair desks and tablet-arm chairs look like the American Envoy line—for these and other American Seating products have been copied often. The similarity ends, however, with appearance. American Seating quality, service and leadership stand alone.

To schoolmen seeking the best values for taxpayers' educational dollars, the widespread imitation of American Seating products is a helpful guide—because it offers abundant

evidence that the engineering skill, research, testing facilities, and manufacturing know-how of American Seating Company are providing values not equalled elsewhere.

Bear in mind when you buy school furniture that products may be imitated, but a tradition of quality, service, and 69 years of leadership in the school furniture market, cannot.

American Seating products are built to serve—not just to sell. They are often imitated—never excelled.



Universal Desk

The American Seating Universal Desk has set the pace for *all* adjustable lifting-lid desks of the connected seat-and-desk type. It surpasses all others by its ability to give best service to learning and teaching day after day for many years at very low maintenance cost—while saving valuable floor space.

American Bodiform Auditorium Chairs

Full-upholstered—the ultimate in beauty, comfort, durability, acoustical benefit. With or without folding tablet-arm.

Envoy Desk

Leadership in the low-cost-per-pupil seating field has been won by the American Seating Envoy Desk because it provides new, improved functional features, and eliminates squeaks, loose joints, objectionable bracing and sharp protrusions. Regularly equipped with all-purpose bookguard on occupant's right (see inset). Assures easy access to visible storage compartment.

American Seating Company

WORLD'S LEADER IN PUBLIC SEATING
Grand Rapids 2, Mich. Branch Offices and
Distributors in Principal Cities.
Manufacturers of School, Auditorium, Theatre,
Church, Transportation, Stadium Seating,
FOLDING CHAIRS.

There's always something going on in this big room that has become the community crossroads. It's dandy for clubs and other get-togethers—big enough for basketball games.

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School _____
Address _____
City _____ Zone _____ State _____

THE AMERICAN
School Board Journal
A Periodical of School Administration

SEPTEMBER 1955

The Quiet Man on the School Board

FRANCIS W. SPRINGER

President, Board of Education
Union Free School District No. 12
Town of Hempstead
Malverne, N. Y.

What vision of destiny inspires the school board member? Is he guided by clear policy or pushed by pressure of routine business into making expediency decisions? His comments should be interesting.

If the school board is a policy-making body, shouldn't a member have his own convictions on the subject? Policy is a set of principles to guide a course of action toward a definite objective. If the member has a definite objective, shouldn't he speak out for himself and say what he thinks, instead of letting the professional educators say what they think he thinks, or what they think he ought to think?

Policy is of fundamental importance. Seemingly, it would be the main subject of deliberation in a policy-making body. Is it fulfilling the policy-making function of the board for the members to spend all their time approving bills, examining specifications of materials, confirming the superintendent's personnel recommendations, and occasionally preparing a new building project? Isn't the school board's real business education? Does the board try to determine what problems today's children will meet when they grow up and decide what they should be learning now in preparation to meet those problems?

Or is the board so occupied with the transaction of routine business that such questions of policy are left to the professional educators?

More Than Endorsement

If the board is to function as intended, shouldn't professional educators influence

rather than formulate, policy? Aren't they appointed by the board to carry out policy, and advise? If the board member merely endorses their educational program, relying on secondhand facts, how can he call it *his* policy and stand responsible for it to the people who elected him? If he gets *both* his facts *and* his advice on the same subject from the same source, isn't he a rubber stamp?

This is not meant harshly toward the busy and bothered board member nor is it any reflection on the integrity or ability of the professional educators. It makes no difference, in this question, that they are competent and sincere. The board member cannot escape responsibility for his trusteeship. The trustee of a fund would be derelict indeed if he relied blindly on reports from a trusted staff, had no clear investment policy, and did not see for himself exactly what was being done with the money under his care. Can the trustee of human resources, so much more precious than money, relinquish responsibility to others?

It is understandable that professional educators would look with suspicion upon attempts of transitory school board members to paw over the delicate details of so technical a problem as educational techniques. On the other hand, doesn't education today belong to everybody, not just to the scholars?

Is learning any longer synonymous with culture? Don't many people today attain advanced degrees in specialized fields without acquiring any of the aesthetic refinement that is supposed to go with enlightenment?

Education is not any more a pale flower, to be nurtured in cloistered seclusion, away from the crass world's bruising conflict for material gain. Today, education is part of that conflict. It is a prerequisite for material gain. Nor can even the scholar withdraw into the "Academic Life." The Academic Life is right out there now, trying to make a living in competition with all the other forms of life.

But no longer is the material world scornful of academic learning. In a few fast moving years the advertising and entertainment industries have used up, and used over and over again, for hardheaded commercial purposes, nearly all the accumulated creations of academic effort since man first learned to record his thoughts. Today even professional educators admit frankly that a justifiable aim of education is to enable the "educatee" to make a better living rather than just to enjoy a private state of intellectual elation. And more and more people are becoming educated.

Education an Institution

Admittedly, the process of educating people requires technical skill, as well as psychological aptitude and a sense of consecration to a high calling. Education is an immemorial institution. Professional traditions must survive in teaching. Amateurs should not appropriate to themselves the prerogatives of an educational staff, any more than professional educators should usurp the policy-making responsibilities of the board. The functions, as well as the viewpoints, of the member and the educator must remain distinct.

While the professional educator requires some sanctuary for the development of the academic viewpoint, the member's viewpoint cannot be developed "in camera." His seclusion would narrow the angle of focus necessary to keep education in its proper perspective. The board member belongs to the public, as the businessman belongs to his customers.

The board member should look at his educational program as a businessman does the product of his factory's engineering staff, not through the eyes of the technicians who made it but through the eyes of those who will finally take it and put it to some constructive use. He controls the design of his product, the better to make it fit the needs of his customers. His dual role of interpreting his customers' needs to his technical staff and representing the product of his technical staff to his customers, is comparable to the dual responsibility of the board member, who is trustee not only of the educational plant but of the people's faith in it as well.

For education must be taken on faith. The businessman's customers may buy his product for a definitely discernible need but the pupil has education forced upon him to serve a future purpose which can only be estimated. By the time he finds out whether or not it serves that purpose, it is too late to do anything about it.

Faith in Education

Can the board member represent the aspirations of the public at secondhand and expect the people to have faith in education? The people want their own ideas expressed through their own elected representatives. They do not want a policy imposed by the decree of appointed offi-

cials. They do not want to be told, "You're too dumb to understand. We know what is best for you."

It is not as though education could be handed down intact from generation to generation. Education changes. What presumably fitted people to meet life's problems 20 years ago would not fit anybody to meet the problems to come 20 years hence. Children are educated for the future, not the past. Parents who complain that their children are not learning the same things in the same way they did, do not understand this fully, nor do others who note with bewilderment the things children study today. The changes, not education itself, provoke attack. The critics always talk about *today's* education.

But all critics have one thing in common: they are attacking *policy*. Why isn't the board member heard from, if it is *his* policy that is being attacked? Certainly he would be vocal if his conduct of fiscal affairs were criticized. A member would defend with vigor the economy and efficiency of his district's business operation and the integrity of its finances. But he is unnecessarily quiet when the guns begin to shoot at the fundamental educational policy for which he is supposed to be responsible.

Is it because he knows he is not the father of his educational program and feels that modesty forbids his intrusion upon

what he has been persuaded is an intimate household problem?

Wouldn't this be carrying delicacy a bit too far? In these days, and days to come, with increasingly greater need for new knowledge and new skills, education must keep abreast of requirements. Can this be done by a timid approach?

Isn't it the board member who should develop a farsighted policy, with advice and help from the professional educator, and sell the public on its benefits? But nothing was ever sold without enthusiasm and enthusiasm can only be generated by courageous devotion to a worthwhile objective and by personal, firsthand experience. And enthusiasm is never quiet.

An enthusiastic approach could solve the practical problem of finding time for the burdened board member to put a real policy-making program into effect. Perhaps matters are given a priority on agendas of meetings that could be accorded the fundamentals of policy formulation. Perhaps by relying more heavily on the judgment of the administrative staff in disposing of routine business, the board could rely more heavily on firsthand facts in dealing with education.

Perhaps the board member would have to sacrifice more of his time, expend more effort. No vision of destiny was ever fulfilled without effort and sacrifice.



SCHOOL COMMITTEE, PLYMOUTH, MASSACHUSETTS

Seated, left to right: Mauro J. Canevazzi, secretary; Ralph C. Weaver, chairman; Donald T. Welch, superintendent of schools; Joseph S. Contente. Standing, left to right: Robert B. Bowler; Spencer H. Brewster; Alton S. Cavicchi

**How free is a person in "choosing a vocation?"
This analysis of the area of industrial or vocational
democracy examines many factors affecting . . .**

Vocational Choice and Industrial Democracy

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It is common for Americans to speak of "choosing a vocation," and many secondary schools and colleges provide guidance to help youth make fruitful and satisfying vocational choices. The opportunity and responsibility of "choosing" a vocation implies two factors of economic structure that characterize industrial democracy but that are less prominent in other forms of social organization. These factors are: (1) a wide range in types of vocations—with great variation in demands made on workers, in rewards offered them, and in numbers of workers required; (2) extensive freedom for the individual to enter a vocation which he prefers. Subsequent paragraphs examine ways in which these factors operate, and the importance for a strong democracy of continuous extension of each factor.

Industrial Complexity

An important aspect of American frontier democracy was the opportunity to go "Out West" if conditions "Back East" seemed intolerable because of economic difficulties, religious intolerance, or political corruption. But essentially there was only one vocation on the frontier—making a living off the land through the primitive agriculture of the day. Moreover this vocation was a family enterprise in which every member who was big enough to work was expected to help. There was little specialization or division of labor; everybody learned to help on practically all types of jobs. The vocational choice was: "do this or starve"—and do it in proper season. There was no such thing as a strike of a month or two during seeding or harvest time. The vocational "choice" was dictated by general ignorance and by the primitive stage of economic development. Somewhat greater choice existed in the more settled area behind the frontier.

It is easy to contrast the vocational sit-

uation in early America with that of the present time. *The Dictionary of Occupational Titles*, in original form plus extensions, lists and describes over 30,000 different types of jobs in this country—and new ones are added faster than old ones are dropped. There is a great variation in the physical strength and endurance, skills, and education required for satisfactory performance of the different jobs, as well as variation in pay, hours and conditions of work, and associates on the job. Regardless of the form of religion or political organization that may prevail in a country, it is only when there is rich variety and extensive interrelationships within the eco-

nomic structure that there is enough variation among types of jobs to make it possible for people with greatly varying capacities to enter jobs in which most of them can make effective use of the kinds and amounts of capacity which they have. A wide variety of job alternatives makes it possible for persons with varying capacities, and with nonvocational interests and demands, to participate in the vocational world and to share in its rewards and satisfactions.

Consequences of the variation in demands made by different types of jobs can be seen in the extent to which women are gainfully employed, although modern furni-



"There is a great variation in the physical strength and endurance, skills, and education required for satisfactory performance of the different jobs . . ."

ture and household equipment as well as the commercial preparation of many foods are important in this connection. Variation in job demands is also reflected in the number of older persons and people with physical handicaps whose capacities prove adequate for an increasing range of jobs. Expanding range in job possibilities makes it possible for an increasing percentage of the adult population to be gainfully employed—so far as capacity to meet job demands is concerned.

Vocational Rehabilitation

A recent development in America that deserves separate consideration, regarding industrial democracy and freedom in vocational choice, relates to vocational rehabilitation. There are perhaps three major ways in which this development enables persons who were formerly excluded from the vocational world to make an economic contribution and to experience the satisfactions of participation. (a) Provision of seeing and hearing aids, artificial limbs, crutches, or other aids and facilities that ordinarily apply directly to the handicapped organism are significant. At this point one might also include especially designed transportation facilities to enable handicapped persons to get to and from work—i.e., wheel chairs, and other indoor vehicles, automobiles with special gear control and other driving provisions, ramps or elevators instead of stairways. (b) Modification can be made in the equipment or machinery of production which handicapped persons use. For example slight modifications can be made concerning typewriter keyboards, filing equipment, location of stock in warehouses or stores, operation of presses and other industrial machinery, or the operation of farm tractors and other agricultural equipment. (c) The specific tasks that make up existing jobs can often be regrouped so that the less strenuous tasks, or those suitable for a person with a particular handicap, can be regrouped to form a new job. In any industry that is growing or changing, considerable regrouping is usually in progress for the benefit of physically handicapped persons or otherwise. Where there is frequent change in job content, it might be easy to regroup specific tasks so as to accommodate handicapped workers.

The extent to which a private industry is likely to incur expense to make adjustments of the kinds suggested in items (b) and (c) will depend on the available supply of nonhandicapped labor, and on pay differentials between handicapped and nonhandicapped workers. For this reason it may increasingly become a responsibility of public and philanthropic agencies to develop the field of vocational possibilities for handicapped persons—despite the likelihood that public agencies in doing so would probably experience criticism for low output per employee.



"It is only when there is rich variety . . . within the economic structure that there is enough variation among types of jobs. . . ."

Health and Educational Opportunity

Aside from specific physical handicap, the general state of one's health may be of great concern in vocational choice. Poor general health, with large amounts of absenteeism, may make it difficult or impossible for a person to hold any type of job. Likewise one's state of health relative to the health demands or hazards of particular jobs is often important—i.e., exposure to outdoor weather, heat, dust, light, or dampness in factory, mine, or other employment. Individuals with health weaknesses might find it feasible to seek employment only in establishments which provide extensive first aid and other health facilities. There is considerable variation among industrial establishments in the extent to which they exceed legal minimums in health provisions. The availability of public hospitals and clinics, or of general community health services, is also important. And of course the need of good care and nutrition of children, to develop healthy citizens and productive workers, should be too obvious and basic to call for elaboration. However one idea which needs more emphasis than it usually receives is the idea of what would constitute *optimum* health (not average health) and how to secure that optimum. The relationships of health to range in vocational choice have numerous ramifications.

In an industrial society in which many jobs demand substantial bodies of general and technical knowledge, freedom of vocation choice is obviously tied to freedom of opportunity to acquire the knowledge demanded. It is easy to observe the marked inequalities in educational opportunity that

now exist in this country, although much progress toward equality has been made during the past half century. In the great amount that remains to be done within the educational sphere lies a major influence concerning freedom of choice and democracy of opportunity in the industrial society of the United States.

Occupational Choice

Through the historical perspective suggested earlier, it should be apparent that the vocational choice open to an individual at a particular time is limited by the level of economic and cultural development of the society in which he lives. A century or two ago an important source of new jobs for people of western nations was the conquest and occupation of new territory, with the subsequent development of government, agriculture, and trade. In some parts of the world conquest is still an important source of jobs. But with the productive parts of the world increasingly occupied, and with countries forming a United Nation and lesser pacts to hold the territory which they have and to reduce the scope of military conquest, new jobs must increasingly come from other sources. Anxiety about existing or feared unemployment, or insufficiency in number of new jobs, has in some countries been a factor in military expansion and conscription—i.e., to keep a substantial part of the population busy with exercises of various kinds, and to use them as consumers of the abundant goods which others produce. This seems to have been a factor in the early days of both Mussolini and Hitler. One difference between this development and the wasteful consumption of the Roman holiday, with

its free corn and entertainment, is that the Roman pattern was less threatening to the neighbors.

When countries checkmate one another in developing military power, the use of the social energy consumed in the process somewhat resembles the use of energy which might be consumed in moving a pile of bricks from one place to another and then promptly moving them back to their former location. A major difficulty regarding the military situation is the fear of being conquered if a country does not match its opponents—with the results that jobs and the accumulated fruits of past labors will accrue to the conqueror. The important point here is that this process is largely one of robbery—taking possession of the creative contributions that others have made, rather than making such contributions.

Stealing from others never increases the sum total of the world's goods and services available to constitute a material standard of living. It is only when the sum total is expanded that the standard can be raised. There are several avenues through which expansion may occur. Mechanical invention makes it possible to carry on new processes or improve old ones, as well as to use new types of raw materials and cause them to become resources. Scientific research similarly makes it possible to use new raw materials and to develop products for new purposes or for achieving old purposes more easily. Agricultural research on fertilizers, on new strains of plant and animal life, or on methods of soil tillage are illustrative, as are new drugs in the medical field, or radar, jet propulsion, and atomic developments in other fields. Much creativity is also shown in business and industrial organization and management—which makes it possible to synchronize extensive and intricate series of industrial processes and to eliminate steps and waste of materials. Through contributions of this kind a great deal of human effort is saved, and the same products are made available in the total economy at less cost in man hours.

Exploration and discovery constitute another important avenue of material enrichment, through locating additional sources of scarce materials or through showing by experiment how previously uninhabitable sections of the earth can be made habitable. It is largely through increasingly appropriating nature's materials for human use that man's material standard of living is improved. From the vocational standpoint, each extension in man's conquest and appropriation of nature means new types of jobs—and new jobs to add to the range of choice open to individuals. Probably it is in what might be called a vertical expansion of the economy which increases the number of types of jobs, rather than a lateral expansion which merely increases the number of jobs of existing types, that there is most possibil-

ity for increasing the range of vocational choice.

One should not overlook the role of education, as well as that of advertising and propaganda generally, from the standpoint of expanding or changing human desires for goods and services and of motivating people to work harder so as to be able to satisfy the additional desires. The entire field of the service vocations is involved here, and this field has wider elasticity so far as potential consumption per capita is concerned than do fields producing material goods for which there is a fairly rigid limit in a man's capacity to consume. Hence it is likely to be in the service vocations that the greatest possibility for new jobs lies—and the best prospect for American industrial democracy to expand the range of choice among jobs.

Social Psychology

With the extensive flow of goods and ideas among nations outside the present Russian orbit, one might expect the desires for material goods and services among the people of these nations gradually to become more nearly alike. This statement implies that characteristic differences in the wants of the German, English, or Japanese people in comparison with the people of the United States are to be explained largely in terms of cultural heritage. That is, most of the wants manifested by individuals in a complex industrial society, as well as the habitual means of satisfying those wants, are products of the environment. The large base of accumulated culture that already exists in countries such as the last four noted, with their material goods and their problems, has much to do with the orientation or uses that will be made of new knowledge. Thus in one culture basic discoveries in chemistry might be oriented on food production and in another culture on synthetic fuel. Hence the traditions and culture background of a people may greatly influence the types of new jobs, or the areas of expansion in vocational choice, that might accompany the development of new knowledge.

The form of political organization that prevails, whether a highly centralized control under a dictator or a form allowing

great decentralization and individual freedom, is an aspect of the cultural background—although perhaps not the most important aspect. However political organization and policy can greatly affect the areas in which new knowledge will be sought and the use that will be made of the knowledge that is acquired. The areas in which new types of jobs will develop can be similarly affected, as well as the extent to which the individual may exercise personal choice regarding the vocation he will enter in contrast with being "allocated into a job."

Concluding Note

Freedom in vocational choice has become an important concept in the development of American democratic ideals. However it is easy to exaggerate the scope of choice or to neglect the factors that create an extensive range of possibilities among which an individual may choose. For example, to say that an individual in this country is free to work or not to work at the job he holds, as is sometimes said in superficial comment during labor disputes, may be equivalent to saying that he can choose between working at that job and starving. Most gainfully employed persons would consider this to be too narrow a range of choice to reflect much vocational democracy. Equally important in the development of vocational and industrial democracy is an understanding among the people generally of the role of invention, research exploration, industrial management, as well as of education and social service in a continuous expansion of types of jobs that exist, and an understanding of the role of government in determining the extent to which an individual may exercise personal choice among existing vocational possibilities.

Industrial democracy will probably be most stable, and make the greatest contribution to the well-being of the people who constitute it, if it fosters an expansion in types of jobs, in freedom of the individual to choose among job possibilities, and in an understanding among the people of the factors in America which contribute to wide possibility of vocational choice. It is also important to understand the ways in which an industrial democracy differs from an industrial society under a dictator.



Members of the South Bay Union High School District are (left to right): Dorothy S. Battersby, Robert R. Trimble, Judge D. Clifford Higgins, Dr. John M. Cooper, and Adrian A. Bibee. A progressive school board engaged in adjusting its teachers' salaries.

The Board and After-Class Assignments for Teachers

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While the matter of out-of-class assignments for teachers—and other aspects of teacher duties—are usually settled within the internal administration of a public school system, there have been instances where such matters reached the stage of litigation. On such occasions the district school board is usually an active participant in the controversy. A recent case¹ involving this facet of school board operations was settled in the California District Court of Appeal.

Facts of the Case

McGrath, a male tenure teacher in the Sacramento Senior High School, brought suit against the district superintendent of schools (Burkhard), the board of education, the individual members of the board, and the principal of the high school to secure relief from certain nonclassroom assignments. The assignments involved attendance, and supervisory duties with regard to spectators, at school football and basketball games. Such assignments usually totaled six per year.

McGrath contended these assignments did not fall within the scope of his duties as a teacher under the terms of his written contract of employment and that such duties were unprofessional in nature. The contract of employment at issue incorporated the rules of the local and state boards of education, as well as the laws of California.

The lower trial court, in denying his complaint, held: (1) the Sacramento board had the right to assign to McGrath any teaching duties within the scope of his credentials or certification, so long as there was no reduction in rank and grade of position. (2) He could be assigned to assist in the supervision of athletic and social activities conducted under school auspices, provided the assignment was made impartially and without discrimination. And (3) as a teacher's employment is professional in nature, the services of teachers cannot be arbitrarily measured—since they would depend upon the reasonable needs of the school program. However, the hours of such services must be reasonable.

This decision is now being appealed.

¹*McGrath v. Burkhard et al.*, cited as 280 P.2d 864 in the National Reporter System.

The Issues

The issues in this litigation were two-fold: first, was the assignment of men teachers to supervisory duties at school athletic events, some of which took place on evenings and holidays, a permissible practice? And second, did such assignments fall within the scope of a teacher's contract of employment?

Findings of the Court

The court first noted that for many years past, the administrative practice of assigning men to athletic events, and women to the cafeteria, dances, and variety shows had been "carried out to protect the welfare of the students." It noted also that for these assignments teachers were selected impartially and without discrimination.

To the contention that no obligation with regard to the athletic assignments was set forth either in the contract of employment, in the rules of the local and state boards of education, or in existing California statutes, the court agreed. However, it added: "While it is true that this specific duty is not set forth, a study of . . . the Education Code [i.e., the state statutes] and the Administrative Code [i.e., the rules of the State Board of Education] reveals that the assignment complained of . . . is and was within the contemplation of the parties when the contract of employment was entered into."

This was so, primarily, because sections of the latter code charged *principals* with responsibility "for the supervision and administration" of their schools—among which duties was the supervision of school "athletic or social activities, wherever held"; and *teachers and principals* with responsibility for the "careful supervision over the moral conditions in their respective schools."

To carry out these responsibilities, the opinion commented that the local school board had required the teachers to attend certain athletic and social activities in a supervisory capacity.

While the Administrative Code did not expressly place the particular duty in controversy upon the teachers, such duty "is placed upon the district authorities who in turn have properly delegated it to their

representatives and agents." The absence of a specific local board rule was not fatal here in the eyes of the court, since "[there] is no necessity that all rules, orders, and regulations for the discipline, government, and management of the schools shall be made a matter of record by the school board, or that every act, order or direction affecting the conduct of such schools shall be authorized or confirmed by a formal vote."

The court then added, significantly: "One of the published [local board] rules . . . in regard to matters of supervision requires teachers to co-operate with their superiors. This is absolutely necessary to carry out the proper administration of the district."

To the allegation that the duties imposed on the teachers at the games were unreasonable and not within the scope of their teaching duties, the court noted that any teaching duty within the scope of the teacher's license could properly be assigned as long as it was "not . . . foreign to the field of instruction," and provided the "required hours of extracurricular activities . . . [were] reasonable. . . ."

The broad grant of authority to a school board to fix the duties of teachers, it continued, "is not restricted to classroom instruction. . . . The day in which the concept was held that teaching duty was limited to classroom instruction has long since passed."

Since at no time during the contested assignments were teachers "to exert police powers"—rather they were to act to protect the welfare of the students, much as they did at school assembly meetings, etc.—the opinion held that the assignments could therefore properly be considered as falling within the general duties imposed on all teachers by statute and State Board rule.

The court then turned to the reasonableness of the hours for such assignments. Noting that the assignments were, generally, from 6 or 7 o'clock to 10 o'clock in the evening—including some Saturday evenings—and on some holidays (viz., Thanksgiving Day), the court held such hours were not unreasonable. "A teacher's duties and obligations to students and the community are not satisfied by closing the classroom door at the conclusion of a class. The direction and supervision of extracurricular activities are an important part of his duties. All of his duties are taken into consideration in his contract for employment at the annual salary. All of this is, of course, subject to the test of reasonableness."

The opinion then concluded: "We must presume that the school authorities were

acting for what they considered the best interests of the students and the people of the district . . . Our courts have repeatedly enunciated the principle that they will not lightly interfere with the exercise of the functions intrusted by law to the school authorities."

Finding nothing unreasonable in the assignments objected to, the present court affirmed the lower court decision and approved the assignments as made.

Significance of the Case

As will be recognized from the foregoing analysis, this opinion might well be considered as the source of numerous legal principles pertaining to local board operations.

Some of those particularly pertinent to teacher assignments follow:

1. A board has the right to assign any teaching duty within the scope of a teacher's credentials and certification, so long as the duty is pertinent to the field of instruction and involves no reduction in the teacher's rank and grade of position.

2. Assisting in supervisory duties in connection with school-sponsored athletic and social activities are appropriate "teaching

duties" and are therefore permissible teacher assignments, when made impartially and without discrimination.

3. The hours of a teacher's professional service, being dependent upon the reasonable needs of the school program, are not susceptible to arbitrary measurement. However, the hours themselves must be reasonable.

4. The lack of mention of specific teaching duties in a teacher's contract will not prevent such duties from being assigned where it can be shown that such assignments fall within the scope of the pertinent educational codes.

5. When local and state educational regulations are made a part of a teaching contract, the duties specifically expressed or logically implied from such codes will be considered as within the contemplation of the contracting parties.

6. While desirable, it is not necessary that all rules, orders, and regulations for the discipline, government, and management of the schools be made a matter of record by the school board, or that every act, order, or direction affecting the conduct of the schools be authorized or confirmed by formal board vote.

meetings together to (a) feel mutual confidence, (b) know that agreement is achieved, and (c) present the summary of agreement to the public in the form of resolutions.

12. Informal votes, preferably by roll call where each can offer meaning to his temporary view, is recommended for tentative agreement. Accumulative temporary agreements should be presented at each successive meeting to see if they stand the test of reflection between meetings. If not, decide whether the desire be to eradicate the temporary conclusion and keep the problem, whether the problem still is pertinent, and whether or not the group wants to find a solution. Uppermost always is whether the solution is to be found or avoided. People can only solve what they really want to solve.

13. When unanimity is not evident, don't press the issue. Complete silence is better than heated argument. If neither seems avoidable, strike that subproblem from the agenda and wait a week or a month before resuming discussion. It is better to be slow than to be sorry five years hence.

14. There will be no victory or defeat for any one person who participates properly. Either of these is proof that one had decided in his mind what others should think or do. Anyone trying to prove himself a leader disqualifies himself because that is not the purpose of meetings on the economic and effective education of youth. Among the members of an equality group, no one tries to prove anything. It must be assumed that each has the intelligence to draw conclusions from facts. Working together long enough to have mutual faith will permit the different conclusions to become consistent without the intent of any individual to dominate.

15. Decisions crystallized into resolutions or action under tension perpetuate tension more enduring than the intended purpose. High pressure for quick action on long-range problems is always caused by or causes tension which, in effect, is substituted for the original problem. The people involved then become the problems.

16. Board or committee resolutions are not for the purpose of finding unanimity. Unanimity precedes final disposition of a problem by a vote. The final resolution and vote of record is for the purpose of telling the public that a problem was considered and solved.

17. Problems are not solved unless there be unanimous concurrence. They are "put over" by the majority vote under the power of "leadership" when no unanimity exists. That may be appropriate where large numbers find close association impossible but it is not the proper way for committee action on which community well-being depends.

If this group operates under these or a similar set of principles, it may be assumed that you will discover:

1. The problems, if any exist;

2. If so, they will have been considered and the best possible solution, under conditions as they are, will have been prepared; and

3. You will have served under conditions designed to keep your behavior at

(Concluded on page 94)

Techniques of Agreement for School Boards*

D. DELMAR GRAY

These are offered as understood from the various students of the nation who have given attention to ways for groups to work together. "You" means anybody anytime he tries to work congenially in a group. It is not intended as arbitrary and what is written as command is only recitation of principle.

1. Decide whether or not a problem exists.

2. Are the people assembled the proper persons to consider the problem?

3. If the answer be in the affirmative, decide whether or not the group wishes to solve the problem. If so, it means that nothing else will determine conversation or action.

4. List in writing all the specifics to be decided. Try not to generalize on anything. Generalizations are usually ways to fog issues and lose sight of specific problems.

5. List suggested solution to specifics in writing. Always write temporary problems and temporary trends toward conclusions. Memory mixes pertinent and impertinent in confusion.

6. Avoid any premature or predetermined conclusions. Don't rush anything.

Avoid resolutions, motions, and votes during exploratory periods. That only closes doors to further discussion. What appears to be unanimity of opinion at a given meeting may only be the emotional desire to get things settled. The next day you may be sorry.

7. No individual should have any ax to grind, seek to be a leader of thought, run the show, or put over anything. You are an equality group if you behave as such.

8. If you find strong emotions that a specific must or must not be considered before living with the facts a few weeks, don't talk. Emotion is more contagious than small pox.

9. If one member talks out of turn, gets a little hot, and speaks unwisely, ignore it. Forget and forgive and don't talk about it to family, friends, or each other. All of us make unwise remarks. Talking directs thinking. Thinking will stir emotions and soon you will have made a heel of one of your group. His effectiveness is then destroyed.

10. Boards of trustees make policies for the education of youth. Their behavior is their policy. It may or may not agree with words about policy. One policy worth consideration is to work together on problems that may not be solved individually and alone.

11. Unanimity of opinion needs no formal vote except as the summary of enough

*The following outline of "Techniques of Agreement" was prepared by Dr. Gray, who is District Superintendent of Schools in the Escondido Union School District, California, for use by the school boards of the area who meet frequently in joint session.

School Health Services

ROBERT H. BROWN, Ph.D.

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Madison, Conn.

During the past years, boards of education have taken over many responsibilities formerly assumed by the home. One of these might be titled health services. Where such services have been provided, it has been customary to employ school nurses. These nurses were often required to be certified by the state department of education and worked independently of other health agencies operating in the community. However, many areas are now discovering that better health services can be offered by a co-ordinated program under the direction of the local Public Health Nursing Association.

For over 20 years, the program in Madison was a school nurse program. Although the relations between the schools and the local nursing association were most cordial, the nurse, working independently, spent full time in school. As enrollments increased and nurses grew harder to find, it became urgent that some other plan of health service be developed. Both members of the board of education and teachers felt that it was imperative to have a nurse in school whenever the children were in attendance. They reasoned that she could render first aid and, although she could not diagnose, she was in a better position to determine the extent of an injury or illness than was a teacher.

A Co-operative Venture

Madison labored under this belief for many years. Experience, however, led to the definite conclusion that school health services can be best provided by a co-operative venture of the board of education and the local nursing association.

After considerable groundwork, it was decided by a joint committee of teachers, administrators, board of education members, and nursing association officials "that better service could be provided—if the nurses worked under the Public Health

Nursing Association." It was agreed that the plan would be tried for one year. Due to its success that first year, the plan has become permanent. In evaluating the results of the first year, the committee reported that "the nurses working together, both in the schools and in the homes, under the same organization, with the same policies holding for all, carried out a more co-ordinated program." The board of education provides supplies and equipment, while the association provides the personnel—some of which is volunteer.

In establishing basic policies, it was agreed that a nurse would report to each building a half hour before the morning and afternoon session started and remain approximately one hour. First aid, in so far as possible, is now handled by qualified teachers. We were pleasantly surprised to find out that several teachers in each building had taken advanced Red Cross courses in first aid and, in addition to these, other teachers signed up for courses. A central office—in our case a clerk in the Town Hall—always knows where a nurse may be located so that she may be reached at once in case of an emergency.

Preventive Health Instruction

The program carried on is rather inclusive, although we have changed the emphasis from curative to preventive health education and treatment. The nurses interpret the findings of examinations to teachers, parents, and children to help arrange for the correction of any defects. In some instances, work may be done at a clinic sponsored by the nursing association. Fees for those who can pay are no different from those charged by the family doctor or dentist. In other words, we are trying to educate the parents that they,

In one phase of Madison's school health services, a dentist examines student's teeth while a parent is present.

and not the schools, are ultimately responsible for the health of their children.

Madison's program consists of physical examinations given before a child enters school and in the third, sixth, ninth, and twelfth grades. Parents are urged to be present at these examinations, or better still, to take their child to the family doctor for the checkup. Booster shots are planned for the same grades, which follows out the state's suggestions of boosters every three years. Thus the immunization may be obtained at the time of examination by the school doctor or private family physician.

A dental examination, without charge, is given to each pupil in grades kindergarten through three, after the consent of the parent is obtained. If the parents wish, children in these grades may have fillings done in school by school dentists. No extractions are done at school and the parent is billed for fillings as if he had the work done at a dentist's office. For those who cannot afford it, the nursing association provides treatment at a reduced fee. No work is done absolutely free and in some instances as little as 10 cents per filling has been charged. A dental hygienist carries on a program of fluorine treatment and cleaning teeth for children, if the parents wish it. Again, a fee is charged for those who can afford to pay.

Vision Tests

Each pupil's vision is tested in September, using the Snellen chart. Reports of those having deficiencies are sent to the parent. An opportunity is given any pupil to be examined at the eye clinic which is held monthly with an oculist in attendance. To note any great gain or loss indicative of a health problem, each pupil

is weighed and measured at the time of the vision test as well as in April of the same school year.

Hearing tests with an audiometer are made every three years by means of the Sweep Test. Any child who does not pass the test is examined by a trained specialist, an audiogram is made, and the child is referred to the family physician for follow-up. Sweep Testing is done in grades one, four, seven, and ten. In the event special help is needed, the child is referred to a special clinic in a near-by city or recommended to one of two state schools where specialization is carried on in this field.

Much of the paper work and scheduling, formerly done by nurses, is now done by volunteer workers from the nursing association or parent teacher group. This has tended to do two things. First, the nurse is relieved of work that can be done by any intelligent person, thereby freeing her to carry on nursing services in the community. Second, it has brought more parents into the picture and makes them realize the importance of good health and that the community health agencies are offering a program to all persons in the area.

As might be deduced from the preceding descriptions, the nurses spend much of their time in the "field." They are calling

on the aged and infirm, tending to the sick, and also making calls to homes concerning school children. When a person is absent from school two days, a nurse checks by telephone or a personal visit the reason for such absence. Pupils who are absent from school for two or more days, must first obtain an admittance slip before being readmitted to their classes.

The program is financed by an appropriation from the town, by public subscription, and by fees collected for services rendered. It has developed a health-mindedness in the community. Where parents formerly depended on the school to look out for many phases of their children's health, they are now beginning to realize that it is their responsibility.

Health Conferences for Teachers

One of the important phases of the nurses' work is the training of teachers. Many teachers—especially those new to teaching—have little idea of the health program in the area. Our nurses hold regularly scheduled group and individual conferences with the staff. The over-all program is explained and individual cases are discussed so that the educational program in the classroom may be adjusted to the specific needs or deficiencies of pupils. The home is consulted on many occasions. Ob-

viously the teacher, not knowing the physical or mental background of certain children, could not understand if the problem resulted from deficient hearing, vision, or whether a childhood disease may have left the child with a weakness.

In addition to holding conferences with teachers, the program of health instruction in the school has been co-ordinated by a committee of teachers and nurses. Schedules for various types of examinations are made out a year in advance. Teachers then plan their program to include the discussion of physical examinations, immunizations, dental care, etc., a week or two before consent slips are sent home. In other words, we are trying to make the parents aware of their responsibilities by educating their children to this fact. There is evidence to show that this is working with the present generation of parents and we feel certain that the next generation of parents—students today—will certainly be better informed as to their responsibilities.

By a co-ordinated effort, Madison's health program is now adequately serving both children and adults in the community. By setting definite policies and determining specific responsibilities, the health of a community may not only be guarded, but also improved.

In two parts, a discussion about a time-saving, functional budget system for ordering and presenting school budget information . . .

Budget Preparation and Administration

CLYDE L. OGDEN, Ed.D.

Superintendent, Sequoia Union High School District
Redwood City, Calif.

I

One of the more important responsibilities of school administration is the preparation and administration of the budget. A budget has often been defined as a fiscal blueprint involving clearly detailed sources of income and specific allocation of funds for definite purposes. When properly done, the budget is not a bewildering mass of figures, but an able assistant to the busy administrator in informing the public, the board of education, and school personnel of the sources of

revenue supporting the school program and the educational program the funds established are designed to maintain during the fiscal year.

A well-prepared budget involves the active participation of every employee of the school district. The more nearly the budget can serve to mirror the needs of the school district, the more perfectly will it function. Budgeting requires "give and take." It requires an understanding that compromises between what may be desirable and what is financially possible. It

requires too that individual or departmental wants be adjusted to the total good. The technique of securing understanding and co-operative support of a budget will vary from one community to another. This is because the budget is made by people and people are so different! In the main though, when people have had the chance to participate and are aware of the limitations of resource and are convinced that the major good rather than the "squeaking wheel" is to be recognized.

A Continuous Process

Like curriculum study, budget preparation and administration is a continuous process. Systematic collection of data, assignments of responsibility, and simplified procedures are basic to effective budget preparation. The budgetary procedures

described here have been developed to meet the needs of a rapidly growing California secondary school district (the Fifth largest union high school district in the state) composed of three high schools at present but with two additional plants in the planning stages and several others known to be required within the next 10 to 15 years.

The following budget calendar has been established:

By October 31:

1. Building principals furnish the business manager with payroll estimates, covering both certificated and noncertificated personnel. Particular attention is given to indicating:

- a) Any additions to staff.
- b) Annual increments due for ensuing year.
- c) Estimate of new teachers required for ensuing year and average salary estimated.

d) Individual listing of all certificated and noncertificated staff members and salary estimates for the ensuing year with increments figured in.

2. Principals and department heads begin the preparation of the tentative budget for the ensuing year. Budget backing is indicated for all items requested. Items, quantities, unit prices, extensions, sources of supply are stated. Budgetary classifications are determined for each item — e.g., 20 tennis rackets to replace broken rackets would be classified as budget item 5. — Maintenance of School Plant; Replacement of School Equipment, whereas 20 tennis rackets purchased to add to the stock of rackets because of enrollment increases would be classified as budget item 10. — Capital Outlay.

The tentative budget is prepared to conform to the classification of expenditures as outlined in the California School Accounting Manual. These classifications are:

- 1. Administration
- 2. Instruction
 - 2a) Certificated salaries of instruction (teachers' salaries)
 - 2b) Other salaries of instruction (noncertificated employees' salaries)
 - 2c) Other expenses of instruction (instructional supplies)
- 3. Auxiliary Services
 - 3a) Attendance and Child Welfare
 - 3b) Health service
 - 3c) Psychological services
- 4. Operation of School Plant
 - 4a) Salaries and wages
 - 4b) Supplies
 - 4c) Utility service and fuel
 - 4d) Other expenses of operation
- 5. Maintenance of School Plant
 - 5a) Repairs — Upkeep of grounds
 - 5b) Repairs — Buildings
 - 5c) Repairs — Equipment
 - 5d) Replacement of Equipment
- 6. Fixed Charges
 - 6a) Contributions to Employee Retirement
 - 6b) Insurance expense
 - 6c) Interest expense
 - 6d) Rental expense
 - 6e) Other fixed charges
- 7. Transportation of Pupils
 - 7a) District buses

- 7b) Contracts and public carriers
- 7c) Special trips
- 7d) Replacement of buses and equipment
- 8. Food Services
 - 8a) Salaries and operational expenses
 - 8b) Free meals to students
 - 8c) Other food services
- 9. Community Services
 - 9a) School playgrounds and recreation
 - 9b) Civic Center activities
 - 9c) Child care centers
 - 9d) Other community services
- 10. Capital Outlay
 - 10a) Land
 - 10b) Improvement of grounds
 - 10c) Buildings
 - 10d) Equipment
- T Transfers
 - T-1 Tuition payments
 - T-2 In lieu costs of transportation
 - T-3 Transfers between funds of a school district as provided by law
- S Stores
 - S-1 Acquisition of goods on hand in central store rooms subject to requisition
- Undistributed Reserve
- General Reserve
- Cash Revolving Fund

By January 3:

1. Building principals submit first tentative budget to business manager for examination and analysis.
2. Business manager examines budget paying particular attention to items specifically controllable by the principal.

By February 1:

1. Business manager returns first tentative budget to building principals with such notations as he has made for the information and guidance of the principals and department heads.
2. As a matter of operational procedure, the business manager will set up several personal conferences with the building principals to review the tentative budget.

By February 15:

1. Second draft of tentative budget returned to business manager by building principals.
2. Additional business manager-principal conferences held on tentative budget

for review purposes.

By March 15:

1. Business manager transmits budget to superintendent for examination and review.
2. Superintendent sets up such review conferences as seem to be required.

By April 15:

1. Superintendent transmits budget to board of trustees.

By May 15:

1. Board of trustees concludes first review of proposed budget.

Before July 1:

1. Board of trustees concludes second review of budget and adopts and files tentative budget with county superintendent of schools.

Before July 15:

County superintendent returns tentative budget to board of trustees.

By July 20:

File publication budget with county superintendent of schools.

July 25-31:

Publish budget in at least one newspaper of general circulation in the form prescribed by the state superintendent of public instruction.

August 1-7:

Public hearing of budget.

August 8:

Adoption and filing of budget.

August 15:

Transmittal of budget to county and state officials.

Budget preparation is greatly simplified when the mechanical details are clearly worked out and a timetable of action and/or transmittal reduced to writing. The timetable just described enables everyone concerned with the formulation of the budget to plan ahead so that the time necessary to devote to the work may be scheduled and necessary conferences established. The format of the budget is well outlined by the Accounting Manual and once worked through becomes meaningful to all who work on budget preparation.

(To be Concluded)



The Bay City, Mich., board of education views a model of a proposed school. Left to right: Robert Reinhardt, George Howard, Leonard Schram, Herman Koffman, S. Dillon Foss, William Anderson, Benjamin Boutell

How "on the job" experience in a summer Guidance Workshop will help Los Angeles vocation counselors guide students toward becoming better employees.

Teachers Work in Industry

RANDOLPH VAN NOSTRAND

Director of Public Relations
Merchants & Manufacturers Assn.
Los Angeles, Calif.

In any metropolitan area, business and industry provide a large share of the tax dollar which supports public education.

They also provide employment for the schools' product.

The level of skill demanded in industrial jobs has been climbing steadily.

These three propositions have resulted in some troublesome questions which are being asked by employers everywhere.

"Are we getting our money's worth from public education?" "Can't the schools turn out a graduate who is better oriented to the world of work?" "What's wrong with the schools?"

In Los Angeles, business and industrial management have turned the query around.

Instead of the questions so familiar to school administrators, they have asked, "What can we do to help our schools to do a better job?" One answer is the Education-Cooperation Committee of the Merchants and Manufacturers Association. It is composed of leading industrialists who are committed to the idea that business and industry have a responsibility to education beyond the mere payment of taxes. They also realize that co-operation with city and county school administrators is very much to their own self-interest. That has been proved.

The Guidance Workshop in business and industry just concluded is a pointed example of what can be accomplished



This teacher, without a special skill, worked in the extrusions department of a large aluminum company.

through industry-education co-operation.

This summer, some 30 vocational counselors from city and county schools have participated in a six-week course given under the direction of the education department of Los Angeles State College and headed by Dr. Harold Reed, research and guidance consultant of the county superintendent of schools' staff. The workshop had three goals: to develop technics and materials for effective vocational guidance; to help counselors gain a practical knowledge of employment conditions through actual work experience; and to acquire empathy for both employers and employees.

Combination Seminar

The Guidance Workshop, which carried four units of college credit, was organized as a combination of work-experience and classroom seminar. The teachers worked a full eight-hour day, five-day week. They attended 11 two-hour seminar sessions in the evenings on the college campus. In a 12th session at the conclusion of the course, the teachers entertained their "bosses."

Early in the summer, top management in a representative group of companies was contacted by the Education-Cooperation



This instructor in metal shop (center) receives directions from a supervisor in an aviation plant.



A teacher of the physically handicapped chose working in a bank which has a policy of employing the handicapped.

committee and briefed on the purposes of the program. Manufacturing, retailing, financial, and public utility industries were included. A list of the companies willing to participate (there were more companies eager to co-operate than teachers enrolled) was provided to Dr. Reed. Prospective teacher-participants were sent to the co-operating companies.

The teachers were required to take the full treatment accorded any job seeker. They filled out regular application forms and took physical examinations. They met security requirements in defense industry. They took aptitude and dexterity tests and they went through established company training programs where these existed. Then they went to work at regular jobs at regular rates of pay. Those who had skills—as for instance, teachers in industrial arts—found jobs at higher levels than those without such skills, but all did useful and necessary work in the companies in which they found themselves.

During their six weeks "on the job" they enjoyed another and very helpful experience. Management arranged an interview with each teacher-worker during which the economic implications of the particular company were thoroughly explained and questions were answered fully and frankly. They were told the amount of money invested to provide the equipment and tools for each job. They found out where raw material came from, who used the product, how it was distributed. They were told how the income dollar was divided between wages, materials, profits, and taxes.

Back in the classroom, the teachers discussed such things as job analysis, industrial relations, occupational trends, the role of management and of organized labor, techniques and materials for disseminating occupational information, and counseling

and guidance in the classroom. They were aided by visiting "professors" from business management, each of whom was a specialist in some field such as personnel work, industrial relations, or supervision.

Each participating teacher wrote a job analysis and occupational brief on his own particular work experience. Each prepared a list of the high school subjects providing essential prerequisites for that particular job. Through the workshop discussions,

each teacher was given an overview of all the different work experiences.

Project Material

Then, working in groups of three or four, they prepared project material to be distributed to all the schools as an aid to the classroom teachers as well as to counselors, in making day-to-day instruction applicable to the working world.

"Through this workshop, and with the co-operation of our friends in management, we have provided an intensely practical approach to counseling," is the way in which Dr. Reed summarized the summer's work. "We have emphasized, by actual personal experience, that our guidance program is not for the primary purpose of helping students to select a specific occupation, but to acquaint them with the world of work, so as to make the educational experience more meaningful. These counselors can now relate the total school experience, the various courses as well as extracurricular activity such as clubs and hobbies, to instilling those desirable attitudes which employers want and need."

Teachers, at the conclusion of the workshop, felt that their summer had been well invested, both from the standpoint of monetary return and from a sense of worth-while accomplishment professionally. One of the most frequent comments was one of surprise at the friendliness and co-operative spirit found in the world of work and the very real interest on the part of management in the welfare of employees. But the practical, firsthand knowledge of job requirements, personality traits of value, and business organization and operation were by far the outstanding values noted by these counselors.

Management was delighted. "Let's do it again next summer," was the theme most

(Concluded on page 94)



This grade counselor (seated) worked as a telephone operator.

An Educational Program for Safety in the Home Workshop

NICHOLAS P. STUMPF

Woodshop Instructor
Maine Township High School
Park Ridge, Des Plaines, Ill.

On every street in the residential district of any town in the United States, every fourth house will contain a home workshop. Of every 13 people as the census goes there will be one involved in some kind of "do-it-yourself" activity. Whenever a farmer gets five dollars for his products someone will spend a dollar for a do-it-yourself job. For every \$12 of home mortgage money there is one dollar spent for a do-it-yourself project.

Sounds like big business and it is. It gets bigger every minute and it's here to stay. It is here to stay because it is a product of the machine age. It is the response of mankind to the leisure time which the machine age has given. This is the first time in the history of the race that man has had time to pursue his creative urges without having to starve in the attic. The urge to creativity seems to be a part of the nature of mankind as the trend grows constantly as more people move into these soul satisfying activities.

What then are some of the implications of this do-it-yourself activity to the schools of America? Certainly it implies that the school course must be carefully examined to see that the creative needs of the community are being met.

The School's Role

The school with its trained teachers stands in a very strong position to foster this type of work. A recent study by the author of the adult evening school offerings of several North Shore Chicago suburbs, revealed over 50 per cent were in the areas of manipulative creative arts. This might indicate that many of these adults are back to school at night to get what they did not get when they attended the regular high school course. It certainly indicates that school activity in the creative arts should be fostered and should grow to meet the challenge. Since many of these craftsmen are from the professional, clerical, and business groups it might mean that just attending school in this day and age should give all students experience in the creative areas of education.

According to the American Mutual Liability Insurance Company, one of the 12



A home workshop student (above) is shown the right method to work the edge of a round cutting board, while visitors watch the use of a safety block as a guard on the shaper.

million do-it-yourself people suffers a disabling injury every minute of the day. One out of every 18 home craftsmen will suffer a lost-time accident each year and the number grows. Of every thousand men, women, and children in your home town, five will be injured each year in Mr. Fixit activity.

The Need for Safety Instruction

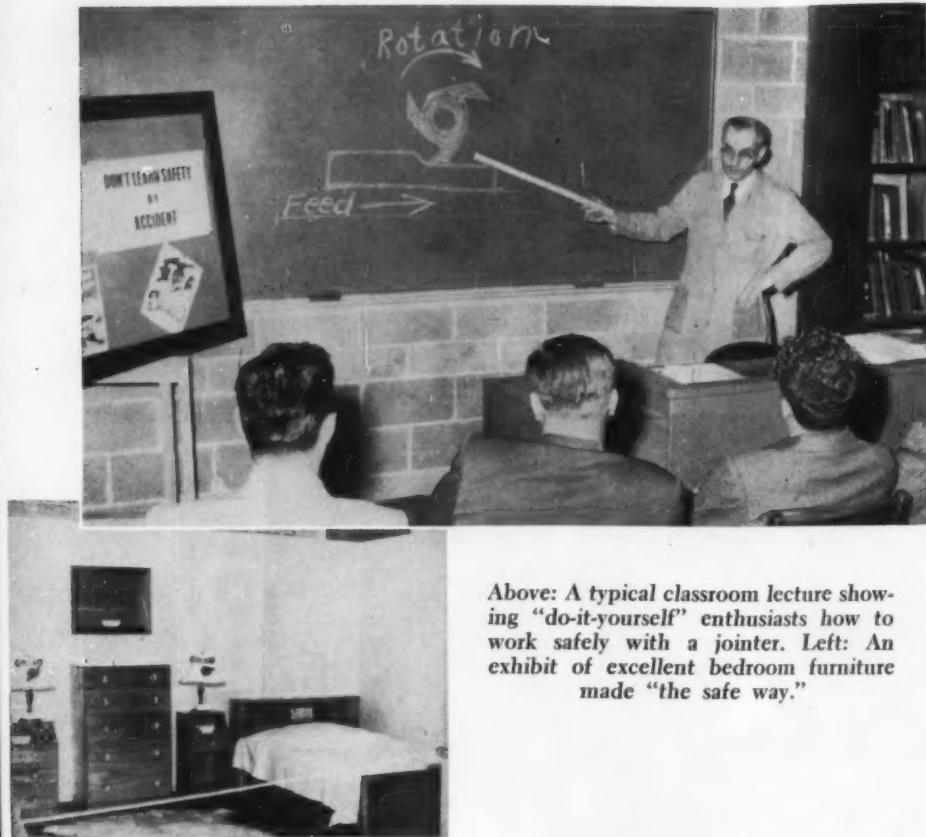
Here is another educational implication, overlooked but very important. It lies in the area of safety education in the use of the do-it-yourself tools and power equipment.

Education for safety in the home workshop can best be accomplished in the modern high school or the well-equipped grade school. The school shops are fitted with the necessary machinery, and they have well-trained teachers. These men are safety minded and well versed in the techniques of demonstrating safe practices for power equipment and hand tools. There needs only to be an awakening to the urgency of the need and a willingness to grasp a



fine opportunity for service to the everlasting enjoyment of the hobby we individually love so well. It is one thing to recognize a problem but quite another to move in and solve it. The craftsmen of any community are disorganized and widely scattered. It is not an easy problem to get them together for safety instruction. The succeeding paragraphs will show how one woodshop teacher inaugurated an educational program for safety in the home workshop in his community.

At Maine Township High School, Park Ridge-Des Plaines, Ill., Nicholas P. Stumpf, woodwork instructor, had a feeling that the do-it-yourself trend was moving faster than the safety instruction necessary to this type of work. With the co-operation of Superintendent Harry D. Anderson and the alert school board, studies were undertaken to test the correctness of the above thesis. The first study consisted of 1000 questionnaires given out through the home rooms. These were given only to students not enrolled in shop courses. It was felt that shop people all get good training in



Above: A typical classroom lecture showing "do-it-yourself" enthusiasts how to work safely with a jointer. Left: An exhibit of excellent bedroom furniture made "the safe way."

safety with tools and power equipment. The study revealed 288 students who were operating power equipment in home workshops without any formal training in safe practices. The study was by no means complete but it clearly indicated a need for action toward education for safety in the home workshop.

A Booklet of Safety Rules

The shortest route to safety in machine operation lies in the "must and must not" rules governing them. Classes were organized to meet after school for a short course and demonstration of safe practices. A booklet of safety rules covering power tools was written and reproduced for distribution and home reference. The course was made to develop an awareness of the danger in the tools and the need to run them in a definite pattern for safety.

Additional surveys in which the medical men of the community were questioned, indicated that the program should be extended to serve the adult craftsmen of the area. The adult group is way ahead of the youngsters in their accident rate. Through the adult evening school program it was possible to organize and serve several classes of hobbyists. Men's clubs, homeowners' clubs, and other organizations have brought many classes for safety instruction.

No opportunity is missed to distribute the safety booklet titled, *Do it Yourself, But do it Safely*. The annual exhibit of woodshop projects included a safety booth in which the literature was given in ex-

change for a questionnaire which asked for the names of clubs which might avail themselves of the service. Recently the Chamber of Commerce ran a Homes and Industries show in which a booth was provided for the display of woodshop projects. Opportunity was provided for surveys and the distribution of safety material. The facts in this study show a very close similarity to national figures on accident rates among home craftsmen.

This living, moving educational program for safety in the home workshop is here outlined in the hope that it will grow to reach every town in the nation where there is a school and a shop teacher to serve. Seldom is such opportunity for service given to a group of teachers. Let us move into the void in safety education. Let us provide this fine group of creative craftsmen with enlightenment to their full enjoyment of their work. Let us supplant ignorance with knowledge, as is our purpose as educators.

ASSOCIATION DISBANDS

The Progressive Educational Association, according to an announcement of its president, Dr. Gordon Hullfish of the Ohio University, was disbanded on June 25. The Association was founded in 1919 and represented in large part the educational views of John Dewey. The dissolution of the group followed the long period of attacks on its educational theories and policies. Credit for the continuation of the organization since 1932 was generally given to Dr. Frederick Redefer, executive secretary from 1932 to 1945.

Welcome to Field School

EARL G. HENRY

Principal, Field School
Milwaukee, Wis.

The development of happy home-school relations is of utmost importance to the schools of today. One opportunity for initiating such good relations presents itself on the day a new family enrolls its children in the school.

A change in schools, even within the same city school system, presents many adjustment problems to both the children and their parents. "Who is their new teacher?" "What is the principal's name?" "Can Susie eat lunch in school?" "When do the bells ring?" "How can I contact the school?" These and many other questions are in the minds of these newcomers.

In most schools some definite steps are taken to acquaint the child with his new school and to help him become a part of the group as quickly as possible. Frequently, less is done to orient the parent.

To answer some of those questions which might be in their minds, and to let them know that we are happy to have them become a part of our school organization, we have recently added a new feature to our welcome to the Field School, Milwaukee. That is a card such as below.

We are happy to welcome you and your family to this neighborhood and to the Eugene Field School. To help you adjust more quickly to a new school situation, we have listed below some information about Field.

The address is 1226 South 7th Street, Zone 4.

The telephone number is Mitchell 5-7688.

Your son/daughter will be in Room No. and have for a teacher.

The bells ring as follows:

8:30	Special Help
8:55	Entrance Bell
9:00	Tardy Bell
12:00	Dismissal
1:00	Special Help
1:10	Entrance Bell
1:15	Tardy Bell
3:15	Dismissal

An excellent hot lunch is served at noon to children who buy a 15¢ lunch ticket each morning in their homeroom. Those who stay for lunch must remain on the school premises during the entire noon hour.

You are welcome to visit our school at any time.

Principal

If a parent comes with the children at the time they enroll, we give it to them then; but if the children come alone, we mail a copy of the card to the home. New parents have reacted kindly to this expression of welcome and appear pleased to think that the school cares enough about them to send such a personal greeting.

**A Program Geared to Solve
Those Knotty Noon Hour
Problems in High Schools . . .**

The Staggered Lunch Hour Plan

RUSSELL D. BRACKETT

Principal, Ramsey Junior High School
Minneapolis, Minn.

Within even modestly adequate lunchroom facilities, providing a pleasant environment conducive to proper and relaxed eating for 1000 to 2000 students is a major administrative problem. This is particularly true if the lunchroom accommodates only a fraction of the total student enrollment. Big schools for years have had two and sometimes three 30 to 45 minute lunch periods. Releasing 500 to 1000 students at a time to go to lunch inevitably results in many problems.

The Ramsey Situation

Several years ago, hoping to give pupils better lunchroom service, Ramsey changed from two to three lunch periods, 35 minutes in length. Approximately 400 to 500 pupils ate during each lunch period. An effort was made to make first lunch, beginning at 11:30, exclusively for seventh graders. Eighth and ninth graders were mixed without plan in the two other periods. Even with two hot lunch lines pupils would frequently wait three to seven minutes before being served. This was eternity to some of them.

It should be mentioned at this point that about 75 per cent of the total enrollment brought a lunch from home, supplementing this with milk, cheerios, and other à la carte items. Milk and ice cream could be purchased in either of two "short lines." About 300 hot plate lunches, government subsidized, were an average daily sale.

A Seating Plan

Various plans for seating pupils were tried. For two years recently, pupils picked their spots and then "signed up" with the understanding that it was for the half year. Each student was asked to clean up his own little pile of refuse or dirty dishes. Table hosts rotated for one or two week intervals. Student service council members served as supervisors over rows of tables. Service council people had the privilege to write "conduct reports" on nonco-operating individuals in the lunchroom and halls. One and sometimes two faculty super-

visors were on duty in the lunchroom. In spite of this organization, results in terms of orderliness and neatness were only fair.

Penny movies were available in the auditorium for the last 10 minutes of each lunch period. The young people would see 10 minutes of a feature picture for one cent. They loved it and flocked to the auditorium in generous numbers if the pictures were right. Despite great vigilance in the selection of pictures, sometimes they were not right from the students' point of view. Other times the pictures were not right from the school's point of view.

Criticisms of This Plan

1. Traffic congestion was inevitable when 500 students returning from lunch met 500

others seeking priority spots in a new lunch line-up.

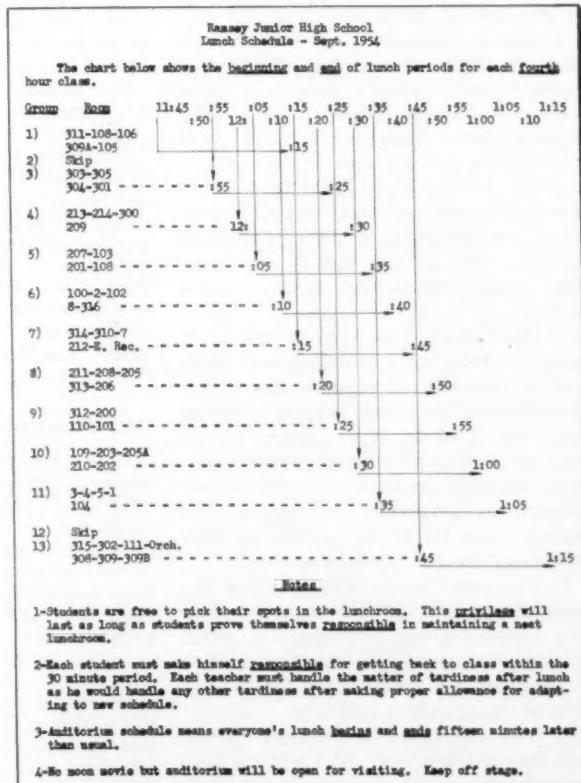
2. Food service was never fast enough for young people who felt a wait of three to seven minutes was far too long.

3. With reasonably long lunch lines a daily reality, constant adult supervision at many points in the building was necessary to curb running.

4. Many problems centered around the administration of the three ten-minute penny movie programs, one at the end of each 35-minute lunch period.

5. Some faculty members felt we had too much organization of students in the lunchroom. Keeping up with the organizational detail was difficult.

In the spring of 1954, realizing a student body of 1550 was swelling to 1750 in September, the faculty and principal agreed some new plan must be found that would at least overcome in part, if not entirely, the five major criticisms of the current plan just outlined.



The Staggered Lunch Plan

Our attention was directed to the "staggered lunch plan" wherein classes are released to go to lunch at intervals of three to eight minutes. As an initial step a faculty representative was invited from a neighboring senior high school that only recently had inaugurated such a plan. The outcome of the meeting was a recommendation that Ramsey try out a staggered plan for two weeks in the spring.

A schedule was worked out that sent five or six fourth hour classes into the lunchroom every five minutes from 11:45-12:45. The last groups thereby finished lunch at 1:15. Obviously, every class group except those that ate the first 30 minutes or the last 30 minutes had a "broken" fourth period: that is, a segment of the fourth period was held before the class left for lunch; a second segment, completing the period, came after the group returned from lunch.

Except for a few criticisms, some of which could be corrected, the faculty of over 60 teachers liked the spring "tryout." With minor alterations, therefore, the decision was made to adopt the plan in the fall.

Six Improvements

Many specific lunch hour situations were improved under the new staggered plan:

1. Problems of hall congestion disappeared. Students were in the halls coming and going constantly during fourth period, but reduced numbers at one time made for an easy flow of traffic.

2. Behind-the-counter service to students in the lunchroom was much better because fewer students arrived at more frequent intervals. Students were going through lunch lines continuously from 11:45 to almost 1 o'clock.

3. The kitchen staff liked it because (1) more hot food was sold, and (2) there were fewer evidences of disorder in lunch lines because no one waited very long. The whole lunchroom became more orderly.

4. Any attempt to keep a record of where students sat was eliminated. There was no hierarchy of student supervisors. Organizational detail was reduced to a bare minimum. Two faculty members, as always, were assigned at a time to the lunchroom. The new emphasis was on individual personal responsibility for cleanup. It worked every bit as well as the old plan with many student supervisors.

5. The noon movies were dropped because they didn't "fit" the staggered plan. The auditorium was left open for social visiting. A sense of relief to the principal accompanied the dropping of the movies with all its attendant problems.

6. With motivation for running in the halls largely taken away, that problem also disappeared.

New Problems

Someone might appropriately ask, "What new problems appeared?" With students constantly and unavoidably in the halls most of the time, some teachers have reacted negatively. If classes in session keep doors closed and students are counseled to stay out of the halls until they know they can return to their classrooms after lunch, noise is held to a minimum. Some faculty hall supervisors are necessary. Each teacher decides with his fourth hour class when the group may return. Some teachers prefer to leave doors unlocked; others think they must lock doors.

Some few classes, notably cooking and

gymnasium groups, must have lunch either the initial 30 minutes or the last 30 minutes. For the gym groups it makes sense to eat after exercising rather than before.

Surprisingly few teachers have objected even mildly to the broken fourth period. Happily, student tardiness to class isn't a problem. With no bells ringing for an hour and a half, each student is strictly "on his own" for watching the time and checking his return to class. The students are equal to this challenge.

Four months after the introduction of our "staggered lunch hour" plan with its many attendant advantages, the faculty is happy to live with it. It seems to work.

Muncie's Popular Pre-School Meetings

KATHLEEN MEEHAN

Supervisor of Publications
Muncie City Schools
Muncie, Ind.

In Muncie, Ind., pre-school meetings are not only a time of professional growth, inspiration, and cultural advancement for the instructional, supervisory, and administrative staff of the city schools. They also set the tempo of excellent harmony and good will by affording a group of approximately 450 to meet socially at an informal coffee hour, gather around luncheon tables at the invitation of the local teachers' association, and spend a half day at organizational meetings in their own buildings and preparing classrooms for the arrival of the pupils.

Top-notch speakers of national renown in the field of education are featured at the two general sessions. Planned the preceding spring by teacher committees, three sessions of group discussion meetings are organized into the following divisions: Art, Family Life Education, Industrial Education, Language and Spelling, Kindergarten, Mathematics, Music, Physical Education, Safety, and Health, Reading, Science, and Social Studies.

The Planning Committee

Under the able leadership of R. D. Shaffer, Muncie's superintendent of schools, a general planning committee meets early in the spring to plan these in-service training sessions. This planning committee, varying from year to year, is composed of classroom teachers, principals, supervisors, and presidents of local teacher groups.

During the next two weeks definite program plans are made. Those who have made special studies of problems relating to the topics are enlisted to give talks, take part in panel discussions, and arrange exhibits and demonstrations.

When the more than 450 members of

the Muncie City School family assemble for the pre-school coffee session on the first day, they receive copies of the staff paper. Planned by members of civic groups, this coffee hour affords new teachers an opportunity to meet other members of the staff and returning teachers, principals, and supervisors a chance to welcome new members of the school family.

The General Session

After the coffee hour, the crowd gathers in a high school auditorium for a general session with the superintendent of schools presiding. Following the general meeting a group discussion meeting lasts until noon. That day the principals and supervisors meet with the superintendent to talk over administrative problems concerned with the opening of school. In the afternoon, the second group session is held.

During the second morning there is another general session with the same plan in operation, followed by the concluding group session. At noon that day the new teachers are honored by being special guests. Members of the Board of School Trustees and also the state representatives and senators are invited and seated at the speakers' table. A varied program, combining professional talks and entertainment, is planned for this luncheon.

After the luncheon, teachers go to their own buildings where meetings are held for the organization of the staff and of pupils for the coming year. This interim gives teachers an opportunity to erase that "put-away-for-vacation" look from the classrooms before the pupils return.

The marked success of these meetings and the splendid effect on the morale of the teachers classify Muncie's pre-school meetings as outstanding events on the school calendar.

How Oregon Builds Schools

DELOS D. WILLIAMS

School Building Consultant
State of Oregon

Visualize, if you can, a new school building covering 37 acres and containing 720 classrooms and other facilities that are a part of a modern school plant. Finally, picture in your mind 25 students in each of the 720 classrooms — 18,000 students in one building. Obviously, no one in Oregon is planning a school of this proportion, but the composite of all school district construction in 1954 would produce a building of this magnitude.

School districts of Oregon are spending approximately \$25,000,000 per year in new construction. This figure is in keeping with the Oregon School Facilities Survey completed in 1954 by the State Department of Education as part of the National Survey under the direction of the U. S. Office of Education. This survey indicated that Oregon needed \$100,000,000 in new school construction by 1959. At this rate Oregon is keeping abreast of their school building needs as a state.

A total of 96 school districts out of 794 have building needs that exceed their bonding capacity. An effort by the State Department of Education to persuade the 1955 Legislature to set up a Revolving Fund for school districts in financial stress fell on deaf ears.

What construction materials does Oregon use in building schools?

In 1954, 45 per cent of school construction was frame. This is as it should be, for Oregon is the largest producer of Douglas fir lumber. Twenty-five per cent of the buildings were poured concrete; 18 per cent were frame with brick veneer and light block; brick on tile and brick on block made up the remaining 12 per cent.

Type of Roof

In a state that has an abundance of cedar, one would think that cedar shingles would be used extensively, but due to roof design few are used. About 92 per cent of all the roofs are built up, using three to five layers of felt impregnated with asphalt. Butterfly, inverted, flat and shed roofs, are in evidence on 9 out of every 10 schools constructed in 1954.

Fenestration

Forty-five districts reported the use of some type of bilateral lighting, such as toplighting or clerestory in classroom construction. Glass block took the back seat to clear glass. About 83 per cent of the main natural light sources was through wood and metal sash, fitted with clear glass.

Heating and Ventilation

Oil was the source of heat selected for 93 per cent of the buildings. Because of favorable electrical rates, a few buildings are heated electrically. Less than 5 per cent of the buildings are heated with coal

or gas. Distribution of heat is through unit ventilators, finned pipe, convectors, floor panels, and others listed in order of frequency.

Mechanical ventilation is found in nearly all gymnasium dressing rooms. Toilet

(Concluded on page 90)

1954 OREGON SCHOOL CONSTRUCTION BUILDING DESIGN AND DETAILS

	Schools & Additions*	Per Cent of Total	Schools & Additions*	Per Cent of Total
I. Exterior Wall Construction			2. Toilet rooms	
Frame	56	45	Mechanical	31
Brick over frame	23	18	Gravity	29
Poured concrete	31	25		60
Block	12	10		100
Others	2	2		
	124	100		
II. Roofing Material			3. Wardrobes	
Built-up roof	103	92	Mechanical	14
Composition shingles	4	4	Gravity	18
Others	4	4		32
	111	100		100
III. Fenestration (main light source)			X. Insulation	
Clear glass	87	83	Fiberglas (batts)	41
Glass blocks and insert			Fiberglas (rigid)	20
sash	14	13	Rockwool	31
Others	4	4	Others	4
	105	100		96
IV. Fenestration (clerestory, bilateral, or toplighting)				100
Clerestory	14	32	XI. Artificial Lights	
Toplighting	15	34	Corridors	59
Bilateral	15	34	Dressing rooms	27
	44	100	Classrooms	78
V. Window Sash			Toilet rooms	54
Steel	38	36	Gymnasiums	23
Wood	51	48	Shops	13
Aluminum	17	16	Library	13
	106	100		2
VI. Chalkboard			XII. Building Details	
Green composition	93	100	A. Floor coverings	
VII. Heat Supply			Asphalt tile	100
Oil	102	93	Rubber tile	1
Coal	3	3	Concrete	39
Gas	2	1	Ceramic tile	28
Electricity	3	3	Vinyl tile	5
	110	100	Cork	2
VIII. Heating Units			Wood	18
Unit ventilators	39	32	Linoleum	2
Overhead convectors	13	11	B. Wainscot	
Finned pipe	29	24	Plywood	39
Floor panels	15	12	Plaster	32
Others	25	21	Hardboard, etc.	18
	121	100	Ceramic tile	16
IX. Ventilation			Wood	6
1. Locker & dressing rooms			Other	14
Mechanical	21	95	C. Wall above wainscot	
Gravity	1	5	Plywood	31
	22	100	Plaster	42
2. Toilet rooms			Acoustical tile	5
Mechanical	31	51	Wood	4
Gravity	29	49	Fiberboard	13
	60	100	Gypsum board	11
3. Wardrobes			Other materials	8
Mechanical	14	44	D. Ceilings	
Gravity	18	56	Acoustical tile	90
	32	100	Fiberboard	4
X. Insulation			Plaster	27
Fiberglas (batts)	41	43	Sheetrock	10
Fiberglas (rigid)	20	21	Other materials	13
Rockwool	31	32		
Others	4	4		
	96	100		
XI. Artificial Lights			Number of Installations†	
Corridors	59	2		
Dressing rooms	27	0		
Classrooms	78	12		
Toilet rooms	54	0		
Gymnasiums	23	0		
Shops	13	3		
Library	13	2		
XII. Building Details				
A. Floor coverings				
Asphalt tile				
Rubber tile				
Concrete				
Ceramic tile				
Vinyl tile				
Cork				
Wood				
Linoleum				
B. Wainscot				
Plywood				
Plaster				
Hardboard, etc.				
Ceramic tile				
Wood				
Other				
C. Wall above wainscot				
Plywood				
Plaster				
Acoustical tile				
Wood				
Fiberboard				
Gypsum board				
Other materials				
D. Ceilings				
Acoustical tile				
Fiberboard				
Plaster				
Sheetrock				
Other materials				

*Number represents the buildings and additions for each topic indicated. Some items do not always apply, especially where the report includes a classroom addition only. Per cent is the fraction each item is to the number reported under the topic, carried to the nearest whole number.

†These figures do not refer to the number of school buildings, but represent the number of times these materials have been used in 1954 school building construction.

The End of a "National Record" for School Service

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Thirty-two years ago the AMERICAN SCHOOL BOARD JOURNAL took note of the election of Mrs. Laura F. Osborn as the first woman president of the Detroit board of education. She then had been a member of the board for six years. For many years thereafter, she was the only woman to hold elective office of any kind in Detroit.

After more than 38 years of loyal and active service to the Detroit school system, Mrs. Osborn passed away July 31st, due to illness brought on by an unprecedented heat wave. She was 81 years old.

When the Detroit board held its first meeting of the new fiscal year about a month ago, Mrs. Osborn had been at her accustomed place, as she had been at nearly all of the hundreds of meetings since she was first elected almost four decades ago—probably a national record for individual service to school administration.

If Ben Franklin were to appear today to witness the far-reaching results of the revolution in political ideas that were initiated by the founding fathers, the effects he would note would be no more startling than the changes in education observed by Mrs. Osborn through her years as a board member.

She did, in fact, achieve a revolution in political practices herself, on a regional scale, early in the century when she and her husband, the late Francis C. Osborn, started a ten-year campaign for school reform. The parents of three children and appalled by prevailing political control of the city's schools, they formed a committee of citizens and through the press and from the platform called for a change. Their slogan was "Children first—the schools out of politics, politics out of the schools."

The result was that in 1916, after a hard-fought battle that had to be carried to the Legislature and to the State Supreme Court, the people of Detroit approved by a 6 to 1 vote a law giving Detroit a small, seven-member, nonpartisan school board, elected at large and serving without pay. This board replaced the cumbersome 21-member, ward-elected partisan board.

A new type of citizenry—business executives, lawyers, physicians, educators—was attracted by an opportunity for constructive public service and 69 persons entered their candidacy in the first primary under the new law. Of the first board of seven thus chosen, Mrs. Osborn survived them all. She had been re-elected every

six years since 1917. The pioneering work in which she participated was the basis for gaining for Detroit an enviable reputation in education.

So successful was the new system of school administration in eliminating "machine" politics, vote trading, and other evils that the voters soon approved a new city charter, changing the form of the city government itself by creating a small nonpartisan City Council, elected at large.

At its most recent meeting, the board of education heard its president remark that "the excellence of the educational service rendered to the people of Detroit is more the result of fundamental tasks well performed from day to day and from year to year than of spectacular innovations that make headlines."

In physical development, Detroit's experience parallels to a degree that of other large metropolitan centers. When Mrs. Osborn became a member of the Detroit board in 1917, the school population was 86,672, housed in 134 schools and taught by 2584 teachers. The budget then was less than 7 million dollars. Today the budget has passed 108 million dollars to provide for nearly 300,000 elementary, secondary, and university students. The instructional staff approaches 10,000. Thirteen new buildings were completed last year; 12 are under construction.

Phenomenal industrial expansion, shifting residential areas, wartime emergencies, the frequent influx of new ethnic groups—these have been the particularly difficult problems with which Detroit school administrators have had to deal since Henry Ford's "\$5 a day" and World War I. But despite these complications, the "fundamental tasks" of education were not shelved.

A Rip Van Winkle, emerging from deep sleep in the abandoned "little red schoolhouse" and sitting in on one of the Detroit board's biweekly meetings, would find himself in a new educational world. At a recent meeting, the board heard progress reports on juvenile delinquency, special programs for the superior child, symphony concerts for children, projects in industrial arts, writing, debating, world affairs. During the past year more than 30,000 students and 3000 teachers visited business or industrial establishments; 25,000 participated in the annual "careers unlimited" program.

Today's accepted responsibilities of school administrators were exploratory ventures during Mrs. Osborn's early years on



The late Mrs. Laura F. Osborn

the board. Projects which she either initiated or supported include music appreciation programs, improved dietary practices in school lunchrooms, and special classes such as instruction for juveniles held in probate court detention institutions and for the physically incapacitated.

A defender of teachers' rights, her testimony in a lawsuit brought by teachers whose salaries had been withheld during the depression-time bank closings won their case and established the inviolability of contracts entered into by the board. She has worked consistently for increased state aid through a more equitable distribution to cities of the Michigan sales tax.

Her early work for an integrated "elementary through postgraduate" educational system for Detroit, including a college of education and various other professional schools, has matured into development of the city's university, Wayne, with a present full-time registration of 17,000. Higher education thus was made available to thousands of young people in the metropolitan area, many of whom work part time in the city's industries.

Mrs. Osborn's work earned the distinguished service award of the Michigan Congress of Parents and Teachers in 1952. In 1953 the United Community Services cited her for 35 years of service to social agencies. In 1954 she was elected one of Detroit's "Women of Achievement." She has been board president six times.

As provided in the law which Mrs. Osborn helped to draft in 1916, board members still serve without remuneration. She reported one other instance of "no change" in educational activities during her 38 years on the board. The board still meets, as it did in 1917, in an old red brick school building in the downtown area which was converted for administrative use. There'll be no modern quarters for the board for a long time, Mrs. Osborn anticipated—"at least not while 26,479 children are still in obsolete buildings and 6309 are on half-day sessions."

"A school board member in a rapidly growing industrial center," said Mrs. Osborn, "may well comment that he does that which is difficult immediately—but that the impossible will take a little longer."



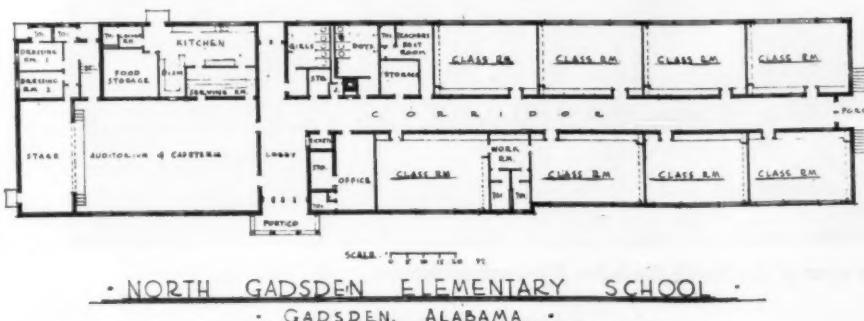
A model small elementary school that provides sufficient classrooms and an efficient auditorium-cafeteria—well within limited funds . . .

The North Gadsden School

CLYDE E. DONEHOO

Consultant, City Schools
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Floor plan for the North Gadsden Elementary School, Gadsden, Ala.—
Paul W. Hofferbert & Associates, Architect, Gadsden, Ala.



Ample space has been provided students of the North Gadsden School, an economical but attractive eight classroom elementary school with a combination auditorium-cafeteria.

This compact educational plant was economical not only in first cost but is now proving itself economical in cost of maintenance and operation. The building is rectangular in shape with an off-center main entrance. The walls are of sturdy brick in pleasing variegated colors of red. The roof,

of gable type, is composed of red asbestos shingles in colors that blend with the brick.

The reinforced concrete slab floor is covered with asphalt tile and supported on steel sills. In addition to the eight classrooms and auditorium-cafeteria rooms, the building contains a principal's office, teachers' rest rooms, workroom, two storage rooms, and toilets.

Between the two first grade rooms a large toilet room for boys, and one of similar generous size for girls, is located. Toilets are also adjacent to the principal's office, the teachers' rest room, and the two stage dressing rooms. The two toilet rooms near the stage are located so that each has an exterior as well as an interior entrance. In the summer, the interior door is locked and the rooms serve the playground group. Under this arrangement, the children never enter the main building and vandalism is reduced.

All the washrooms have ceramic tile floors and glazed tile walls.

The rooms are ventilated through the use of roof units installed on the ridge of the roof. Ample downspouts on each side of the building are connected to storm sewers, eliminating damage from excessively heavy rains. There is a large head on the downspout and its location is well below the top of the wall.

The roof over the secondary entrance at the end of the building is supported by ornamental iron columns. The banisters are in iron grillwork to match.



The first grade classroom features enough space for varied activities. An all-purpose sink is in the work counter under the shelf to the left of the built-in wall cabinets. Separate doors lead to toilets.

The North Gadsden Elementary School is heated by steam from a thermostatically controlled gas fired boiler with all safety controls. The walls are finished in plain plaster and the ceiling is acoustical plaster.

Designed by Hugh Ellis of the architectural firm of Paul Hofferbert & Associates, the school has a cost, exclusive of site and equipment, of \$160,210 or an economical \$10.63 per square foot.



An exterior view of the North Gadsden Elementary School

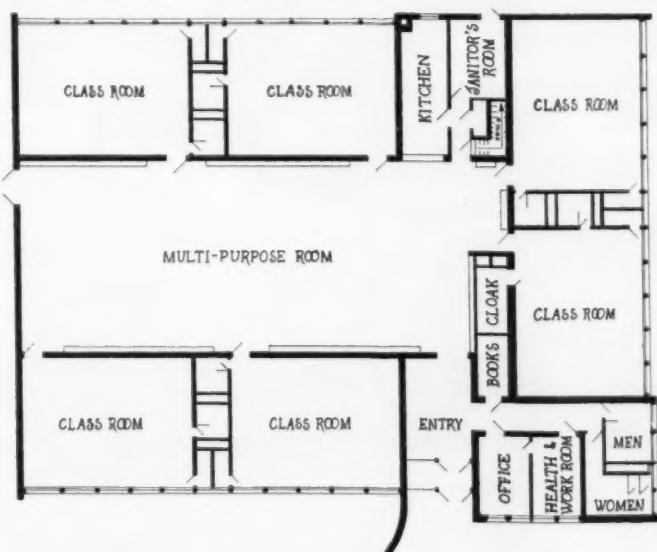


In less than one year's time, an elementary school had to be built from available funds. This is how Williston did it . . .

The Lewis and Clark Elementary School

LEONARD T. HAVIG

Superintendent, Williston City Schools
Williston, N. Dak.



Floor plan of the compact Lewis & Clark Elementary School, Williston, N. Dak. — Wells and Denbrook, Architects, Grand Forks, N. Dak.

For an outlay of \$121,851, including architectural fees, Williston, N. Dak., in 1954, constructed an attractive six-classroom elementary school building of masonry materials. The low cost was made possible by the elimination of space not absolutely essential, planning of structural details to reduce labor and material, and reduction of outlay for ventilating and heating equipment.

Construction of schools in Williston School District No. 1 had a sudden increase due to the discovery of oil in the area and the school construction financing potential soon was practically exhausted.

A long range construction planning program which had been carefully worked out in consultation with personnel from the State Department of Public Instruction and the United States Office of Education had become obsolete.

One day the administration became aware of the fact that a new elementary school building was needed in the Sorenson

Addition at the beginning of the next school term. A master plan, worked out by a municipal planning consultant, had not provided for residential development in the Sorenson Addition but a tremendous development had nevertheless taken place in the matter of months.

Steps were taken to secure a site, to engage an architect, and to plan a building which could be erected for the funds which could be raised. All of this had to be done in less than a year's time.

In the fall of 1953 a site of 6.2 acres was purchased and the architectural firm of Wells and Denbrook of Grand Forks, N. Dak., was engaged. Bids were taken on March 10, 1954 and the building was occupied on the opening day of school, September 7, 1954.

In planning the building, the following criteria were set up: (a) The materials used in the construction had to be such they would be readily available so the building could be completed in as short a time as possible; (b) The cost of the building must be low in order that a complete building could be financed with funds available at the time; (c) The building must be attractive so that everyone concerned, the general public, the parents, the residents of the area, and the pupils and teachers would like it; (d) It must provide the facilities considered desirable in a small neighborhood school; (e) To speed construction, built-in cabinets were omitted but custom-made items were to be used instead.

In considering the types of construction.

wood, masonry, concrete block, and steel, an analysis of costs by the architect revealed that a masonry and lightweight concrete block building could be erected for the funds which were available; consequently, a decision was reached to plan for that type of building.

A contemplation of possible economies led to the consideration of the possibility of eliminating corridors by using the multipurpose room as a corridor also, and grouping the classrooms around it. Since the school was to be a small one, there didn't seem to be any serious objection to this dual use of space.

Another economy suggested was the elimination of a basement and using a floor slab on earth fill with piping laid directly in the fill.

The type of heating plant seemed to provide one means by which economies could be effected, so plans were made for a hot air heating plant, hot air being conducted through ducts at the perimeter of the building. These were constructed of concrete block, the walls of which also served as a foundation for the building.

Control of heating was provided for by laying out the hot air ducts in four zones with dampers in each thermostatically controlled.

The possibility of economies in roof construction led to specifying a pitch and gravel insulated roof on wood deck supported by laminated wood beams, with the interior exposed surface covered with acoustical tile.

To reduce the possibility of delay in

construction due to delay in delivery of materials, wood columns for the support of the laminated wood beams were specified.

A further economy was affected by confining plastering to the pupils' toilet rooms and using painted concrete blocks otherwise as the finished interior surface.

These things were decided to be essential:

Lighting

Double glass for outside fenestration
Glass block for light distribution
Slim line fluorescent lighting in the classrooms

Woodwork

Birch doors, door trim, and wrap facilities
Good quality hardware

Plumbing

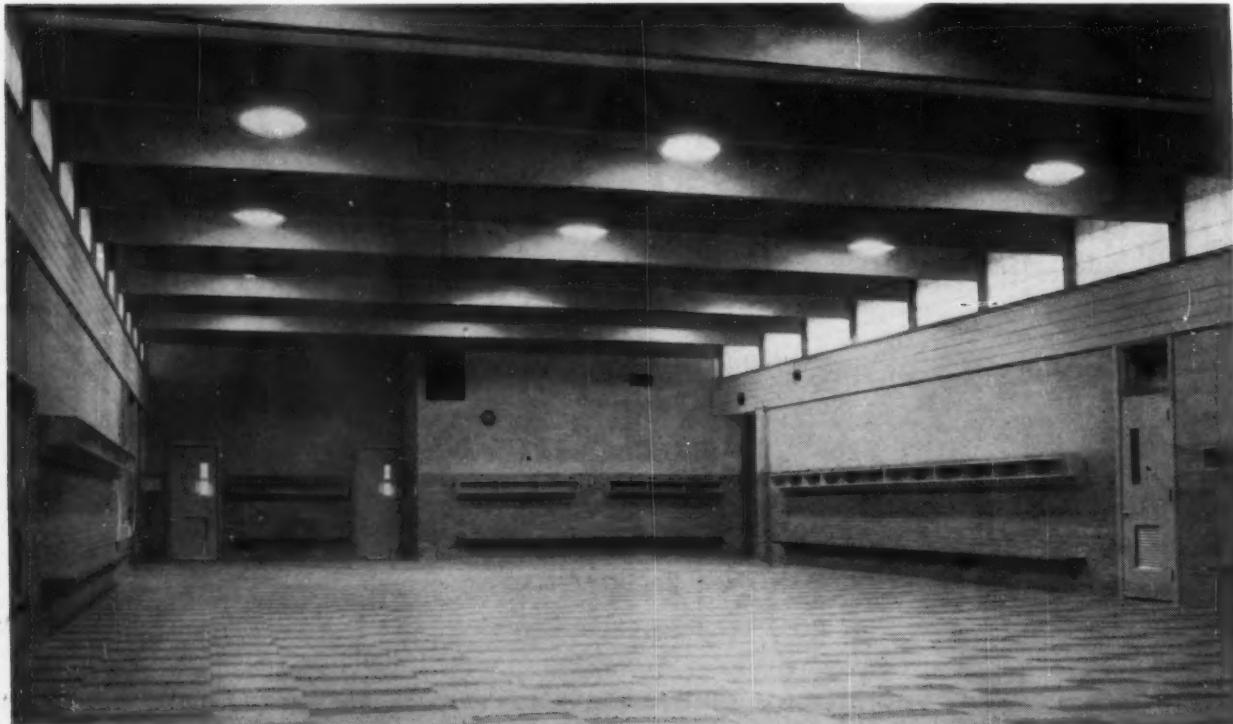
Two toilets in connection with every classroom and a drinking fountain and large washbasin in every classroom

Separate additional toilets for adults
Drinking fountain in the multipurpose room

Rooms

Rooms in addition to classrooms, which were deemed essential were principal's office, combination clinic and teachers' lounge, combination bookroom and educational material storage room and workroom, kitchen, custodian's sink room, stor-

(Concluded on page 93)



The corridor-multi-purpose room of the Lewis and Clark Elementary School, showing classroom doors

A Study of Current Practice —

Are Modern Classrooms Lighted for Better Learning?

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Good classroom lighting has been one of the fundamental aims of modern design of schools. This emphasis on classroom lighting has been outstanding during the past 15 years or so in the United States and equally so in other countries.

"To what extent have these efforts and developments really produced good classroom lighting?" is a question this writer asked at the inception of a recent study of the subject. The literature on this subject in the areas of engineering, architecture, and education seems to justify some real concern about current trends and accomplishments. It seems that in spite of striking changes in classrooms, most designs include some features which are detrimental to efficient and comfortable seeing. Designs for classroom lighting almost universally seem to fail to a degree, in that they do not provide illumination specifically to meet the needs of the activities carried on in classrooms.

Educators have a primary responsibility for defining the visual tasks of the classroom and to insist upon adequate lighting for the performance of these tasks. To do so requires a clear understanding of the educational programs and of the relationships between *seeing*, *lighting*, and *learning*. Architects and engineers *alone* cannot be expected to plan and build for good illumination.

The literature reveals that many poor classroom lighting practices are common. These practices seem to be the results of misconceptions about the nature of vision, the nature of the classroom activities, and the application of illumination in visual tasks. Perhaps the discussion of these misconceptions will help educators and school boards in planning better classrooms and in the more effective use of existing rooms.

Some Light on Misconceptions

All pupils in a classroom need essentially the same amount of illumination. This misconception is vividly demonstrated by the complete lack of consideration for individual differences in illumination designs. Except for suggestions about special rooms for partially blind and deaf students the problem is largely ignored. This, in spite of the fact that not only visual defects but normal wide range of seeing abilities are to be found in every classroom.¹²

The human eye is a good judge of light conditions. Manual controls, or no controls at

all, characterize the design of virtually all shades, drapes, blinds, louvers, and other light control devices. The installations assume that teachers can be responsive to changes in the natural illumination. Actually, the human eye is a poor judge of light conditions. Conscious discomfort comes only under extreme conditions. Discomfort alone is not a suitable guide to light conditions.

Adjustability is essential in any device for maintaining illumination at an appropriate level, but automatic controls should at least supplement manual controls.

Illumination sufficient for visual discrimination is satisfactory for efficient learning. This again is a misconception and fails to recognize that visual discrimination is not the same as meaningful efficient seeing.¹³ On the contrary, we can see and not know. Meaningful seeing implies illumination for comfort, speed, and efficiency in visual tasks. Lighting systems designed essentially only for visual discrimination and not for comfort and ease of seeing fail to meet requirements for good learning environments.

Foot-candle measures of illumination are sufficient for determining the adequacy of illumination in classrooms. The data most frequently presented to establish the adequacy of classroom lighting designs are in terms of foot-candles of illumination. Actually, brightness and contrast are the more significant factors in judging classroom illumination. This kind of data is rarely used in judging the educational adequacy of classroom designs.*

Brightnesses and contrasts are quite different for each visual task, hence over-all foot-candles of illumination on a desk have little meaning. Unfortunately, judgments concerning designs for classroom illumination have generally been made on the basis of this latter factor. Judgments based on the adequacy of illumination for various specific learning activities are rare in practice or in the literature. Yet these are precisely the considerations needed. The educational adequacy of a classroom lighting design can only be assessed in terms of the visual conditions provided for very specific learning activities. For example, 10 foot-candles might be adequate illumination for reading 8 point type on white paper. Twenty to 30 foot-candles would seem necessary for the same ease in reading typical handwriting in pencil; liquid duplicating might require as much as 40 foot-candles, while jobs like sewing and reading maps might require from 60 to 200 foot-candles depending upon conditions of contrast, size, time, and the individual.

*A recent exhibit by leading California school architectural firms at San Jose, Calif., revealed only one firm presenting any data on brightnesses in their classroom designs.

Concerning Classroom Activities

Children and youth approach learning tasks only while facing in one direction. Explicitly few educators or architects accept this concept. Yet various features of many new classrooms and much of the emphasis in the literature leads one to recognize the influence of this misconception.

Throughout the literature the photographs of classrooms with huge window areas and no light or glare control facilities are abundant. An Australian publication⁴ picturing outstanding classroom designs from all parts of the world indicates that the vast majority of "modern" room designs emphasize glass wall areas and virtually ignore light control facilities. Reference to any number of educational journals reveal the same facts. In many recently constructed classrooms all over California there are no light controls on any windows except those facing south.

Obviously it was never intended by the designers of any daylit classroom that pupils should perform visual tasks with window areas in the field of vision, for even partially louvered windows facing north are much too bright for comfort under these conditions.⁶ Obviously, it is desirable that students shall never perform visual tasks facing in the general direction of windows, with poorly controlled light.

If this is so, what becomes of flexible and informal seating arrangements? "Desks should be arranged so as to make use of available for higher levels of illumination for classrooms, light and to avoid having outdoor brightnesses in the normal field of view of the pupil."⁷ What is regarded as the "normal field of view" of an active learning person is not quite clear. How are activity programs involving map making, modeling, dramatizations, round-table discussions, etc., to be carried on? With uncontrolled window glare these activities are possible but only in violation of all that we know about a healthful, comfortable, and efficient visual environment. Is it possible that the emphasis upon daylighting without adequate light control produces a classroom with inordinate power and control over the very nature of the curriculum which it is designed to serve? Is this more dangerous, more powerful a threat to curricular improvement than any dictation from administration or agency could possibly be?

A single level of illumination is adequate for effectively performing the visual tasks of the classroom. This conception is most widely accepted. There are unlimited references to minimum standards for classroom illumination. The "minimum standard" — is 30 foot-candles on the working surface of each pupil's desk.⁷¹² The proudest claims for various daylight classroom designs are that they provide a minimum of 30 foot-candles on desks and give relatively uniform illumination over all desks.

This striving for uniformity at a minimum standard level is unfortunate as a suitable end in itself, for while desk top lighting may be adequate, little consideration is given to the light provided on other surfaces such as chalkboards, bulletin boards, easels, display cases,

and craft areas. Furthermore, the acceptance of a "minimum standard" should be examined more closely. Some questions concerning the widely accepted 30-35 foot-candle standard are brought to mind by the fact that many modern industrial plants have from 30-70 foot-candles.⁷ This does not establish a case but it does suggest the need to attach more significance to the term "minimum" in minimum standards.

Fundamentally, the concept of a single level of uniform illumination must be challenged on two points.

1. It cannot be maintained without provisions for adjustability in both daylighting and artificial lighting unless, of course, the full "minimum" amount of artificial illumination is used constantly.

2. The various visual tasks of the classroom demand either variable sources of illumination or a very high level of illumination; for the brightnesses required for various classroom tasks range from virtual darkness to near sunlight.

Wherever daylight is used to any extent for illumination it will vary in amount with the time of the day, season of the year, condition of the sky, and the color of the interior decorations. This latter may change incidentally with changes in bulletin board displays. Artificial illumination should be designed specifically to compensate for these changes.

Studies which have been made to demonstrate the feasibility of daylighting classrooms are numerous. Generally, these designs do not, apparently, produce really uniform illumination,⁸ and in many instances the high levels of illumination are obtained in part by permitting considerable glare! A study by Altree¹ on chalkboard lighting indicates that wall surfaces often get only one-half to one-fourth of the illumination of desks and that this illumination varies greatly at different heights. Various assertions that unilateral or bilateral daylighting gives satisfactory illumination all too often fail to consider glare, wall illumination, sky conditions that may be favorable or not, and may underestimate brightness requirements for some classroom tasks.

The survey of the California Council of Architects⁶ on brightnesses in typical California classrooms was rather extensive. The data reveal convincing evidence that neither uniform illumination or brightness is being achieved. Furthermore, it is doubtful that the wide variations in brightnesses found in the classrooms are appropriate to the visual tasks required.

The failure to provide really high level uniform illumination required for various tasks to suggest again that "—the need for adjustability of lighting to correspond" is very real and cannot properly be ignored.¹⁷

Appropriate brightness ratios are a concern only within the student's field of vision. This misconception assumes that tasks are undertaken pretty largely from the desk position. Were this true the field of vision would be that area within an arc of about 60 degrees. Just the minute activities are encountered from positions other than the desk or seat a new area is incorporated into the field of vision. In other words the problem of glare must be considered in terms of many areas and positions. The field of vision must be regarded as virtually the entire room. The ceiling might be excepted.

The Application of Illumination

Light from over the left shoulder is best for comfortable seeing. Light from any side produces some shadows and makes seeing more difficult. Light from overhead is best.¹⁷

Ample light automatically provides for com-

¹⁷Writings in various journals which give data on classroom brightnesses in various places in the room make this quite evident.

fortable seeing. As mentioned previously, visual conditions must be considered in terms of brightnesses and contrasts for the specific and varied tasks. For example, "—the projected picture is impossible if the room—is not adequately darkened. . . For comfort for the spectators the screen should be the brightest object in the room."¹⁴

Blinds are an essential part of the classroom furniture. When properly used they are a significant factor in light control. Improperly used they are an ingenious device for producing glare and excessive brightness ratios. In any case blinds alone cannot be considered adequate for the instructional requirements in room darkening.

The amount of daylight which enters a classroom is to be great restricted if comfortable conditions are preserved. . . all windows must be louvered or shaded to cut out all high brightness.¹⁵ This in turn makes the use of supplementary lighting a frequent necessity. "Supplementary lighting should provide an adequate level of illumination and brightness contrasts that makes for comfortable seeing under any circumstances."¹⁵ This implies careful choice of luminaires and appropriate placement of shielding.

Daylight is uniquely superior to artificial light for seeing and learning. Windowless interiors and even windowless buildings can be perfectly controlled environments with modern lighting and air conditioning.¹³ The final answer to this story is not apparently known. Certainly, too much dependence upon daylighting seems to create more problems than it solves. The safety factor in windowless buildings in an atomic age has been ignored by school people generally. Power costs have declined enormously in the past 50 years,¹⁸ thus making greater reliance on artificial light economically possible. Daylight quality artificial light can be effectively approximated. More consideration of appropriate lighting regardless of its source is overdue. The problems of "daylighting" have too long obscured the more fundamental problems of appropriate lighting for learning.

Light control for projecting instructional materials can be solved effectively by simple drape or shade installations. This is a misconception in spite of recent developments in the use of drapes or shades. Ventilation remains a critical problem. Furthermore, authorities agree that conditions most suitable for learning by projection are much more complex than simple "room darkening." The Audio-Visual Education Association of California³ has stressed the need for "room conditioning" for projection purposes.

For instance, "When a projection screen is used in the classroom, illumination of the front wall behind the screen will improve the ease of viewing the projection."²

To assure optimum use of all projected materials, the light reaching the classroom should be controlled so that the illumination in the room . . . does not exceed one-tenth foot-candle.¹⁹ No stray beams of light should be admitted anywhere in the room. Illumination requirements for the use of color films, filmstrips, and opaque projection are all quite different.

In spite of the proved worth, wide acceptance and phenomenal growth in the use of audio-visual materials in the classroom, "New bi-laterally lighted buildings have been built where no method of adequate light control was provided and projection equipment has proved useless."²⁰ This is slightly reminiscent of the man who built the boat in his basement and found it too large to get out.

In Summary

It seems to this writer that the classroom lighting picture is plagued by two problems. On the one hand, fields of educational practice and illuminating engineering have not

pooled their talents to push existing lighting developments into new functional designs. On the other hand, too much reverence for daylight illumination and too few educational specifications for lighting needs have combined to retard and discourage radical departures from tradition to test designs which might be more genuinely functional than most of what we have at the present time.

From the point of view of making use of the best that is presently available for classroom lighting, there are many facilities which should be incorporated in our classrooms. Horizontally adjustable louvers covering the entire window area give promise for glare control and room darkening alike. Special illumination for chalkboards, bulletin boards, and special work areas seems essential. Artificial illumination as a general light source should certainly be designed as a substitute for daylighting in terms of both brightness and quality. Thus it would be expected that artificial lighting could serve to either supplement or in some cases even replace daylighting.

From the point of view of some radical departures from tradition in an effort to better design for the genuine needs of the classroom, some of the following goals might be envisioned.

General Illumination

1. Variable illumination from zero to at least 100 foot-candles.
2. Maintained illumination regardless of weather conditions, seasons or time of day or night.
3. Illumination to have the qualities of sunlight. This would include the complete visual spectrum of white light and perhaps even some of the nonvisual areas of the spectrum for health purposes.
4. Illumination to produce no glare or high brightness ratios from any functional angle of vision. This implies all angles except, perhaps, straight up.

5. Illumination to remain relatively constant as desired at all hours of the day and without teacher or pupil attention. Automatic controls are required.

6. Allow for seating arrangement, working position, or any combination thereof with good seeing conditions.

Special Illumination

1. Permit different levels of illumination in different parts of the room simultaneously.
2. Provide for very high levels of illumination in several places in the room.
3. Make the bulletin board captions discernible from any part of the room.
4. Make writing on the chalkboard visible for the most distant person in the room without extra large writing.
5. Provide for clear and easy viewing of displays and/or exhibits in display cases and shelves.
6. Permit projection of films, filmstrips, slides, etc., with some illumination but essentially no loss in image definition.
7. Permit projection of opaque and micro images with maximum definition.

Simultaneous with considerations of these kinds for good classroom illumination, other factors of room design and artificial conditioning of room environment cannot be neglected.

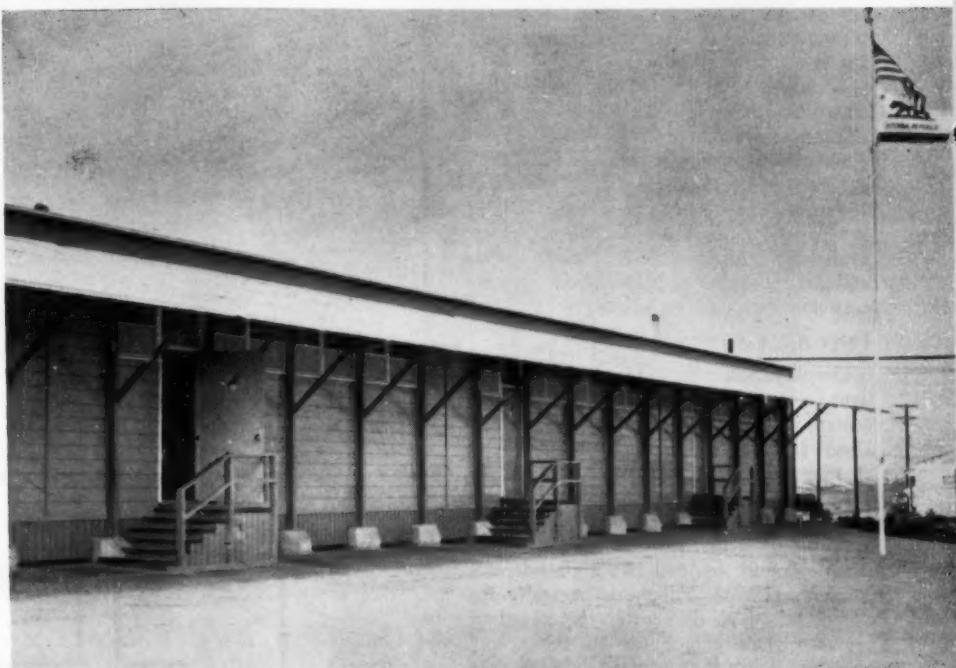
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2. *American School and University*, "The American Standard Practice for School Lighting," 21st ed., 1949-50, American School Publishing Corp., N. Y.
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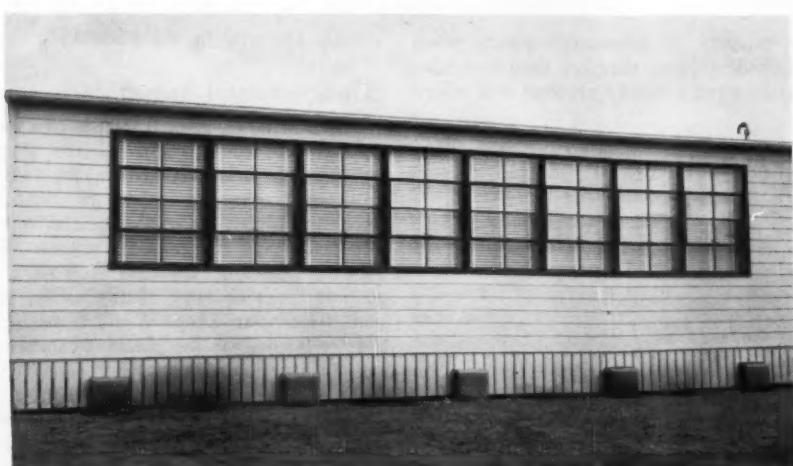
(Concluded on page 93)

A successful answer¹ to the problem of housing rapidly increasing and mobile school enrollments is San Diego's inexpensive and flexible . . .

Portable Standard Classrooms



A boon to the taxpayer, as well as to the school administrator, are these sturdy frame classrooms "on wheels," ingeniously pioneered by San Diego. Teachers like them for "their ample storage space and their access to out-of-doors."



Exterior view of the San Diego portable standard classrooms.

What does a school system do when its school population mounts more rapidly each year for a period of more than ten years?

When the "temporary" rapid growth of school enrollment population experienced by California during the twenties became a continuing problem, school board leaders of the San Diego City Schools realized something radically different was necessary to cope with this mass migration.

Out of the emergency, San Diego innovated the portable standard classrooms — "a new way of life for the San Diego Unified School District." These classrooms are equivalent in almost every essential detail of interior environment to the classrooms provided San Diego children in permanent school buildings. Regarded now as neither temporary nor emergency units, they are a permanent part of this progres-

sive community's efforts to house its ever growing, ever shifting school population.

Fewer Double Sessions

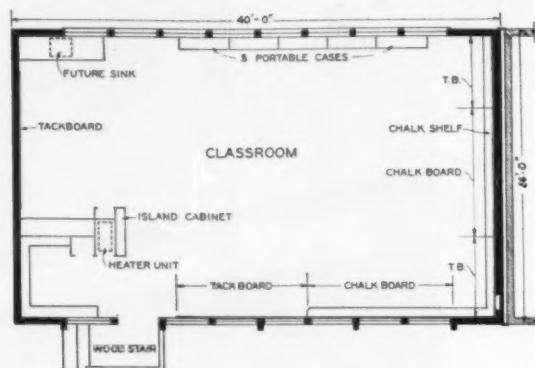
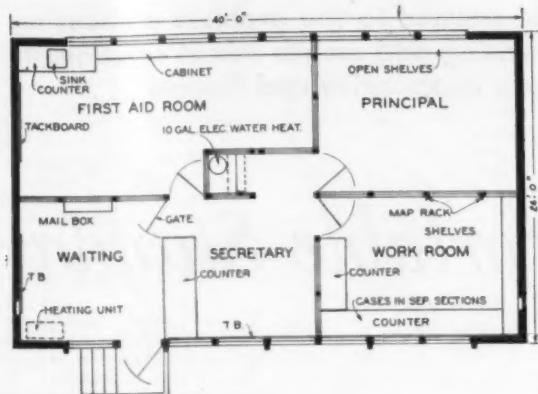
Since the early 1940's, some 360 portable standard classrooms have been built and are now in use in San Diego. Relatively few of its elementary or secondary schools do not have one or more of these classrooms as part of its permanent school facilities. Fifty-three of these classrooms were moved to 16 school locations during the summer of 1954. More are being moved with each school term to meet population demands indicated by periodic potential-school-enrollment checks. So vital in San Diego, this type of mobility means a solid decrease in double sessions for areas of rapid growth.

Of sturdy wood-frame construction, these classrooms offer in size and general facilities the equivalent of a regular classroom. Built-in supply storage cabinets, sink units, etc., are easily provided in the San Diego classroom units. Effective lighting, heating, ventilation, and acoustic treatment are available; built-in cabinets, chalk boards and tack boards, and insulation are also easy and inexpensive to install.

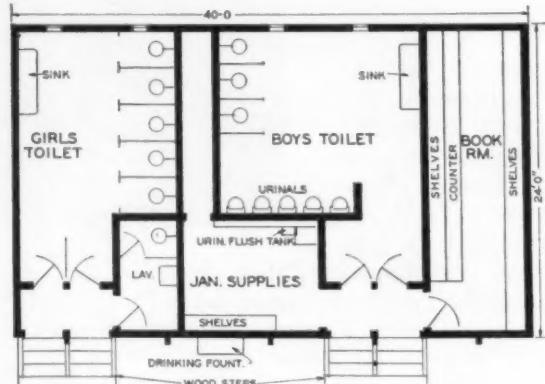
Over-All Economy

Despite slightly higher maintenance costs over a longer period of time, over-all economy is a distinct feature of the San Diego portable standard classrooms. With an approximate construction cost of \$7 per square foot, the classroom's total price is about \$6,700 for about 960 square feet of well-built structure that, under normal climate conditions, will last a considerable amount of years. They can be ready for classes 60 to 90 days after the award of contract. This choice use of the school building dollar has helped stretch the limited building funds available in the school district.

Perhaps the greatest feature of these units is their flexibility. Set on concrete foundations, they are readily transportable on a trailer, making it possible to have classrooms ready when the need arises. They have proved ideal when used temporarily while a permanent structure is under construction, reducing overcrowding in neighboring schools. They can increase



Floor plans for three units in the San Diego portable standard rooms. The administrative unit (above) offers more than adequate built-ins, while the toilets (below) supply handy service. Ample space is a highlight of the classroom unit (left). Together, the three units make up the complete standard "portable school."

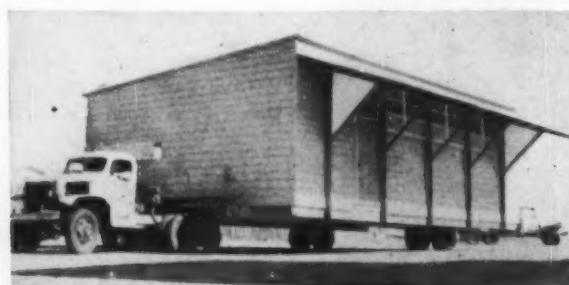


the capacity of permanent plants when enrollments jump sharply; they can adequately serve a rapidly growing area where

schools are only in the planning stage.

"One Successful Answer"

Administrative and teaching personnel in the San Diego schools agree almost unanimously that this "emergency" classroom offers every necessary requirement. According to Dr. Ralph C. Dailard, superintendent, San Diego city schools, the portable standard classroom "has made it possible to avoid most of the double sessions which San Diego would have faced had we waited for the planning, financing, and construction of 'permanent' facilities." The ever increasing school population, adds Dr. Dailard, "has necessitated finding new answers to the problem of schoolhousing. The portable standard classroom has proved to be one successful answer."



A semi-trailer shown transporting a San Diego portable standard classroom



The gymnasium of the Clarence Olson School, Woodstock, Ill.—Bradley and Bradley, Architects-Engineers, Rockford, Ill.

**"Two schools in one" . . .
Woodstock's complete combination
elementary and junior high school —**

The Clarence Olson School

NELSON N. STORK

Superintendent of Schools
Woodstock, Ill.

Constructed in one of Chicago's rapidly growing outer suburbs, the new Clarence Olson School of Woodstock, Ill., was flexibly designed to offer a complete educational program for both grade and junior high school students. With an eye to future population increases, the new school can eventually provide an especially extensive curriculum on the junior high school level alone.

Included in the two-story, \$600,000 structure are six grade school classrooms and kindergarten. The first grade room and kindergarten have individual washroom facilities and the other five classrooms have convenient wash sinks.

The junior high section of the building has seven general classrooms as well as two science rooms, two home-economics rooms, shop, commercial rooms, music suite, and library. Boys' and girls' toilets are on both floors.

A spacious gymnasium with stage area and locker rooms, kitchen with multi-purpose room, faculty and health rooms with separate toilets, general and private offices, and sufficient storage space complete the "extra" services provided by this compact school. The multi-purpose room, when used for larger school and community activities, can be enlarged by opening folding partitions to include the stage

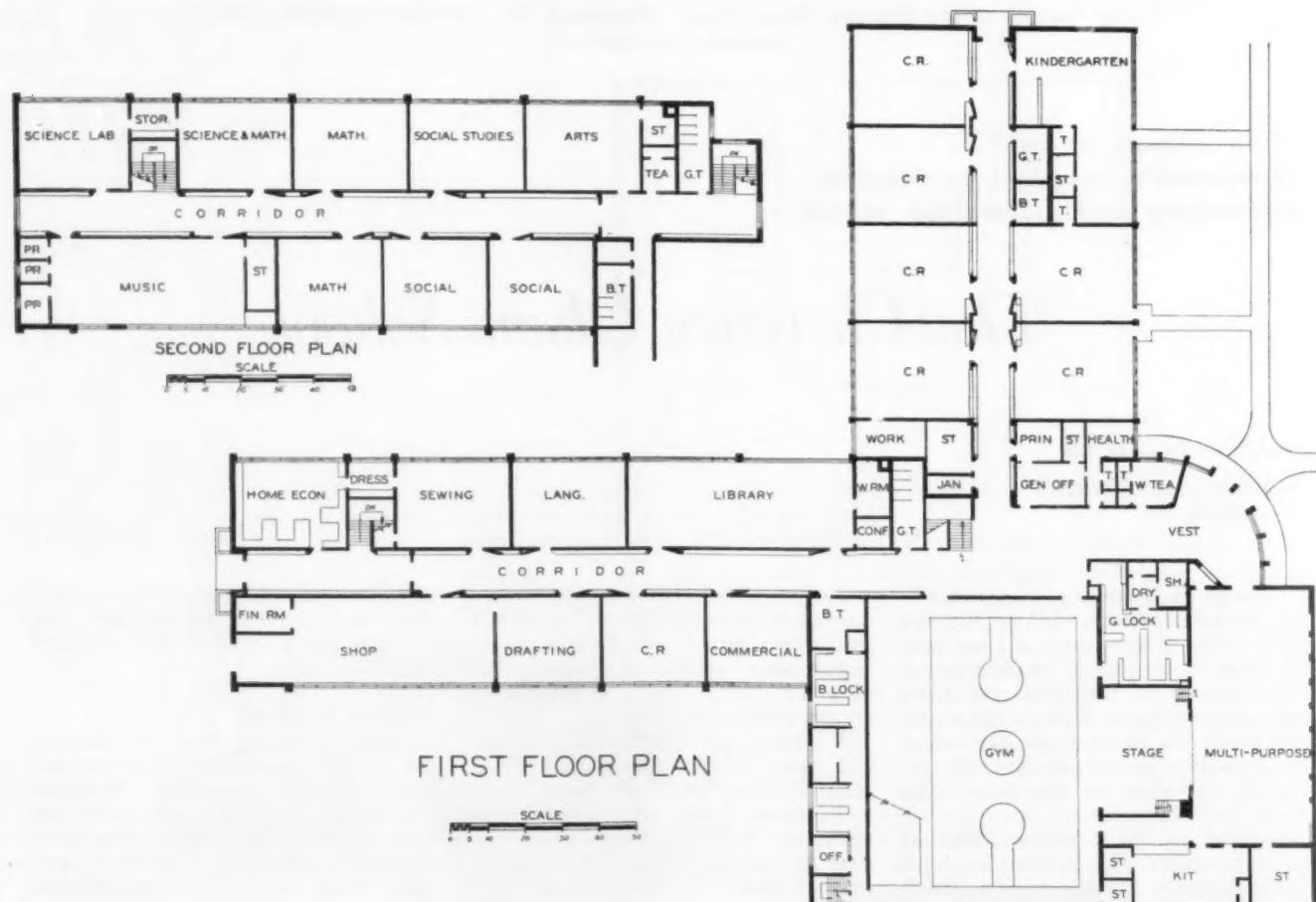
area. The gymnasium can easily accommodate the variety of athletic and social activities that a school of this type would entail.

Modern Materials

The school makes liberal use throughout of such modern materials as tile, aluminum, and glass blocks. Attractive trimming of the brick exterior walls with limestone makes the Clarence Olson School pleasing in appearance as well as functional. Wood panels and exposed concrete block are used as interior finish for the classrooms, while the glazed tile walls in the washrooms, foyer, and corridors means



An exterior view of the Clarence Olson School, showing the attractive front entrance



The floor plans for the Clarence Olson School



A typical classroom of the Clarence Olson School, illustrating the easy-to-maintain tile floors. Built-in cabinets are shown in the background, while fluorescent fixtures supplement the effective natural lighting.



The long, unobstructed corridor of the Clarence Olson School. Doors fold back flat against the walls, lockers are recessed into the wall, and absence of partitions means less trouble in the student traffic flow. Picture also shows the corridor clerestory lighting with artificial lighting fixtures concealed in clerestory unit.

easy, economical maintenance through the years.

A distinctive feature of this modern school plant is its effective natural lighting in all rooms. Glass blocks are used when necessary to reduce glare from the sun. Other windows have long-wearing aluminum frames. Fluorescent fixtures supplement artificial lighting when necessary. Tile is used for flooring in the classrooms and terrazzo in the entrance, kitchen, toilets, and locker rooms. The steel joist ceilings are acoustically treated in their interior finish.

Low Costs

With an area of 46,700 square feet, the Clarence Olson School was built at a total contract cost of \$600,593 or \$12.85 per square foot. A breakdown of the main costs includes:

General Contract	\$409,100.00
Plumbing and Heating	83,258.00
Electric Contract	31,740.00
Library Equipment	4,812.56
Home Economics Equipment	4,636.40
Folding Bleachers	4,272.00
Lockers	10,919.85
Kitchen Cabinets	2,492.43
Kitchen Equipment	4,965.00
In-Wall Tables	5,580.00
Sewing Machines, Tables, and Stools	1,817.64

Offering its 600 pupils an integrated, well-rounded educational program from kindergarten through eighth grade, the Clarence Olson School is a functional school built for the future, of which the citizens of Woodstock, its school staff, and its board can be highly pleased.

BUILDING PROGRAM

Approximately \$4,378,000 has been spent on a school construction and improvement program in the Pulaski County, Va., schools. The funds, obtained from local, state, and federal sources, built or constructed additions to two high schools and eight elementary schools.

SCHOOL BUILDING IN MISSOURI

State Commissioner of Education Hubert Wheeler of Missouri, in his Annual Report for the year ending June 30, 1954, reports that during the year, 26.6 cents of each dollar spent on the public schools went for capital outlay — buildings, equipment, and debt service. The total amount for these purposes was \$51,681,408, which was greater than the amount spent for the same purposes the preceding year by more than \$18,000,000.

It is believed this accelerated rate of school construction will continue for the next few years. To take care of a greatly increased school enrollment by 1960, and to provide new school facilities, it is estimated that nearly 10,000 new classrooms will be needed by 1960. The present cost per classroom is about \$20,000, which means that \$200,000,000 will need to be spent on school plants by 1960.

SCHOOL BUILDING NEWS

A new multi-million dollar school building program is nearing completion in Kanawha County, W. Va. A bond issue voted in 1951 was for a total of \$9,950,000, and the 76 projects in the program will cost \$10,715,000. An additional \$350,000 will be used for additional furniture and equipment, and \$615,000 for additional costs in the building program.

New school lunch trends mirror modern thinking on how to meet the problem of serving more children with limited facilities . . .

New Ideas for School Lunch Programs

School food services are growing and changing in the face of the challenge of increased pupil population, inadequate buildings, and low budgets.

With more mothers of school-age children working outside their homes than ever before, and thus unable to provide a hot lunch at noon for the children; and with the residential area served by the new suburban schools frequently too large for children to walk home for lunch, the need for food service has increased.

At the same time, thinking about school lunches has changed in this respect: School lunches became widespread during the depression with a twofold purpose. They supplement the diets of acutely needy children and help dispose of agricultural surpluses. Since then, nutritional studies of children of all economic backgrounds in many areas of the country have indicated that poor people have no monopoly on nutritional deficiencies; nutrition education and nutritional improvement are desirable everywhere. Emphasis has therefore shifted to

provision of a good noon meal and to using this as the nucleus of life-situation teaching of good food habits.

But the demand for other school services and growth of the school-age population has put a heavy strain on school budgets.

Evidence of these difficulties was obtained in a recent informal survey of state school lunch supervisors conducted by the Field Research Division of the Paper Cup and Container Institute. Thirty state supervisors responded. Of that number, 24 indicated that in schools where there was little or no food service, the chief reason was "lack of facilities."

The "lack of facilities" was sometimes amplified as "lack of space," "lack of funds," "inflexible school buildings," "one-room schools with too few children to warrant a program," "lack of finances for initial investment in equipment," "former lunchroom used as classroom because of overcrowding," "lunchrooms a health hazard because of inadequate facilities."

Under the circumstances, school officials

and architects have turned to these solutions to the problem: (1) a central kitchen for a school district; (2) individual kitchens in schools with mobile food service to classrooms instead of a dining room; (3) multi-purpose use of dining areas; and (4) installation of vending machines to provide part or all of the food and beverage requirements of a school.

The Central Kitchen

When a central kitchen is established in a school district, the kitchen itself is usually located in a high school, and provides food service for that school's students. Therefore, food preparation in the kitchen requires careful scheduling and co-ordination. If freshly prepared food is to be served to the school's students, it must be prepared on a different schedule from the menu for the outlying schools. Food for the latter has to be finished and packed in time for a truck to make its rounds, through traffic, to get in time to all the participating schools.



A "mobile" steam table stationed outside the classroom serves elementary school children a hot lunch — one of the most popular and effective solutions to the problem of serving the school lunch. The children return to their desks to eat.

Preparation of larger quantities in a central kitchen demands little in the way of extra equipment or personnel, and it has the tremendous advantage of reducing food service payroll, as well as surplus food waste. That is, the number of highly skilled supervisors and cooks can be reduced. It is easier to control food quality, less equipment is needed, and small schools that really need food service can get it. Service in the participating schools can be handled by part-time employees, perhaps mothers, who are happy to have the opportunity to work a couple of hours a day.

Mobile Food Carts

Two or more systems may be used for delivery of prepared food to outlying schools. Some schools use hot-and-cold carts. These are rolling steam and refrigerated tables of varying degrees of complexity in which food can be kept hot or cold in bulk in cafeteria pans, or proportioned in the containers from which they're to be eaten. These carts are as much serving tables as they are transportation units, of course.

The other system utilizes vacuum-insulated containers, from which food is removed to a skeleton cafeteria counter at the school where it is served.

Outlying schools using a central kitchen need have no built-in food service facilities such as a kitchen, dining room, and dishwashing room. This is actually the case in one group of four small schools in Charlotte, N. C., according to a report made to the American School Food Service Association. These schools have no food service or dishwashing facilities, and no room for their installation. Instead, hot food is carried by truck to the school in "hot carts." "Cold carts" remain in the schools to carry supplies and milk. Paper service is used for food and beverages, and disposable plastic flatware is provided.

A truck with a hydraulic tailgate is used in Los Angeles to carry food in "hot carts" or insulated containers to the schools from a central kitchen. Part-time workers come in for two hours a day in the outlying schools, serving a total of Type A meals to children up to eighth grade. In the one school that has no dishwashing facilities, service is entirely on paper. For the rest, the dishwashing load is cut by serving salads and other menu items in 4-ounce round, nested paper containers with lids.

Overcrowded dining rooms in schools that have food preparation facilities have forced lunchroom directors to think up new ways of serving children in their classrooms. Brazosport, Tex., was faced with such a problem. Its answer: an electric steam table to hold hot food, and a semi-enclosed hospital food cart, with room for milk, flatware, napkins, and desserts.

Children come into the corridors to pick up their lunches, return to classrooms to

A valuable supplement to the cafeteria are vending machines shown serving orange juice. They relieve the school lunch room of some traffic and its employees of extra work.



eat at their desks. Two part-time luncheon workers serve up to 230 pupils in about 10 rooms in less than an hour with this system. It's worked out so well that what started as emergency procedure has become standard practice for classes up to sixth grade.

A cart costing about \$500 will accommodate about 200 to 300 ovenhot meals in three insulated "hot compartments." Salads and other cool foods may be refrigerated with ice, dry ice, or kept at room temperature, for brief periods.

For the new one-story campus-type schools so prevalent in Southern and Western states, another system for classroom lunches has evolved. Here again, where population has expanded to the point where many schools are on double sessions, there is no dining space other than the classrooms. One Florida school has found it expedient to proportion hot and cold foods in round, nested paper containers, along with sandwiches. Each class receives its meal in a wire basket carried by two of the children from the serving area. Another child carries a tray of milk containers. This system works even for little second graders, but would not be practical where children had to go up and down steps. Refuse is collected by the children in wastebaskets and dumped into covered garbage cans located on the cement walks outside the classrooms.

With current building estimates about \$12 to \$14 a square foot for new schools, architects have been trying to make every square foot count. One way of doing that is use of multi-purpose rooms for dining areas.

One Long Island high school has two 200-seat dining rooms completely walled away from the serving room. They're used as study rooms until five minutes before

lunchtime and then go back into service as study halls five minutes after lunch hour ends. Much of the food service in this school is on paper, and trays are light enough for students to bus their own to the windows of the adjoining dishwashing rooms. Plastic-laminate-topped tables get a quick wipe after lunch and they're ready to be used again for study.

Vending Machines

Perhaps the most startling innovation in school food service is the use of vending machines. Experimental installations were set up for a three-month period in Chicago public schools, vending a long list of foods including plain and chocolate milk, fruit juices, carbonated beverages, hot soup, sandwiches, hot dogs, French fries, potato chips, pies, cakes, ice cream, fresh fruit, and candy. Tests showed that students bought more beverages from vending machines than when they were sold over a counter. Milk consumption more than doubled.

Vending machines are finding a place in school food service systems. In Florida, where the mid-session "orange juice break" is state-wide, some county school systems have settled on use of vending machines for juice, thus relieving kitchen labor of the extra duty. Machines are filled, cleaned, and serviced by the vending machine operating company, which also pays a fixed fee for the use of the space.

In the face of soaring building and equipment costs, and fantastically increased school enrollments, school boards have taken a fresh look at the goals of a good school lunch program, and with the aid of architects and school lunch supervisors, come up with new answers to some of the old problems.



In certain locations a sprinkling system must provide a large supply of water to maintain the turf.

Standards and Specifications for the Athletic Field Sprinkling System

ELDON I. JENNE

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Portland Public Schools
Portland, Ore.

A sprinkling system is necessary to maintain properly the turf on an athletic field. There are several varieties available on the market, each of which has certain desirable features:

1. *The Hand Method:* This is the horse-and-buggy type. It requires an adequate supply of hose and man power to apply the water. The water can be placed exactly where you want it and in the quantity you desire, but it is far too slow and expensive to operate.

2. *Traveling Sets:* Once the equipment is set in place it can be left unattended and the area will be sprinkled. However, there is equipment to take care of and it is a slow method.

3. *Rotary Pop-Up:* This is the best in theory that once the underground piping is installed with the Pop-Up heads in place there is no equipment to handle and it sprinkles the area rapidly and adequately. However, the rubber covered heads are somewhat hazardous on the turf and the Pop-Up mechanism may cause some trouble in operation. It is the most expensive type and since a certain number of heads operate as a unit it is not possible to

sprinkle one certain area with this system.

4. *Fixed Heads:* This system is similar to the Pop-Up system excepting that the heads are fixed. Once the system is installed there is no equipment to handle and while it is good for home lawns, it is not practical for the athletic field, for the heads need to be padded and the grass around the heads requires constant trimming so that the sprinkling will be effective.

5. *Quick-Coupling:* This is considered to be the best type of sprinkling system for an athletic field. It is an underground system with no heads or obstacles on the playing surface. It requires the attachment of a number of full or part-circle sprinkler heads when the system is working. Each sprinkler head is a separate unit and any part of the field may be sprinkled independently of any other part by simply coupling in the head or heads on the area or areas desired to be watered. The valve is installed well below the surface of the ground and is equipped with a flexible rubber sleeve extending up through the turf. A rubber cap fits in the opening of the sleeve when the valve is not in use. The sleeve

gives with the slightest pressure from above and cannot cause tripping or stumbling. The valve is self-closing and leak-proof. This type of sprinkling eliminates soft spots and puddling adjacent to the heads. Provision is made in the system for attaching a hose swivel to the couplers at any valve making it possible to use the hand method of watering when desirable on particular areas.

By placing a line of quick-coupling valves along the pole of the running track which surrounds the athletic field, part or full circle sprinklers can be placed in the valves to water the running track only, the field only, or both the track and field as desired.

Contract Specifications

Following is a breakdown of the specifications for the athletic field sprinkling system at a Portland, Ore., high school:

1. Scope

1.1 It is the intention of these specifications to describe completely the sprinkling system for the athletic field at Roosevelt High School, Portland, Ore.

1.2 The work contained in these specifications involves the furnishing of all labor, material, and equipment necessary or required to properly install a complete sprinkling system.

1.3 They include all excavating, piping, tapping, and metering to the city water main, backfilling of the area within the running track, and the procuring of all permits, tap, meter, and sprinkling apparatus as hereinafter described.

1.4 It is intended that $\frac{1}{4}$ of the entire area may be watered at one time.

1.5 The contractor shall include the installation of a 4-in. line from the city main to the center of the field.

2. List of Drawings Applicable

SPRINKLING SYSTEM FOR ROOSEVELT HIGH SCHOOL ATHLETIC FIELD

Drawing No.	Title
159-4	Site Plan
159-5	Piping Layout

3. Materials

3.1 Piping and Fittings:

- 3.11 All piping shall be the sizes as called for on the drawings.
- 3.12 All pipe and fittings from 3 in. and smaller shall be newly galvanized.
- 3.13 All piping larger than 3 in. shall be black dipped standard pipe.
- 3.14 All pipe shall conform to specification.
- 3.15 Fittings shall include elbows, ties, courses, branches, bushings, plugs, unions, and reducers and shall be malleable-iron screwed fittings.
- 3.16 All pipe and fittings shall be galvanized to meet the requirements of specification.

3.2 Sprinkler Apparatus:

- 3.21 All valves and sprinklers shall be of bronze and brass construction.
- 3.22 Sprinklers shall furnish precipitation of at least .22 in. per hour.
- 3.23 All sprinkler fittings shall be the quick-coupling type.
- 3.24 Quick-Coupling Valves, 1-in. pipe size opening, 30 gal. per minute capacity, with flexible rubber sleeves, for installation on athletic fields. 36 required.

3.25 Slow motion rotary sprinkler head with $\frac{1}{4}$ -in. nozzle. 4 required.

3.26 Part-circle sprinkler head with $\frac{1}{4}$ -in. nozzle, with sandproof bearings, 5 required.

3.27 Couplers to operate No. 14 EST valves. 11 required.

3.28 Hose swivels with 1-in. female bottom for $\frac{1}{4}$ -in. hose connections. 2 required.

3.29 Install meter where shown.

3.30 Connect the meter to existing 6-in. water service.

3.31 All to be done as required by the Water Bureau, city of Portland.

3.32 Any testing charges on the meter as required by the Water Bureau shall be paid for by the contractor.

7. Gate Valves in Concrete Vault

7.1 Connect to existing 6-in. water service as shown. Install concrete valve vault with one 4-in. gate valve, or equal, to serve sprinkler system and one 2-in. gate valve, or equal, and plug to serve future field house.

7.2 Provide steel plate cover, hinged with eye and padlock.

8. Drainage of Pipes

8.1 The sprinkling system shall be designed to conform to the 12-in. crown of the field to insure the proper drainage.

8.2 Provide drain valves as indicated on the drawings so that the entire system may be drained to prevent the freezing of pipes.

9. Tests

9.1 The tests shall be made for leakage with hydrostatic pressure 10 per cent in excess of the head for which the pipe is banded, pressure shall be maintained for 24 hours.

9.2 Any leaks which shall develop shall be closed.

10. Backfilling

10.1 Backfilling shall be done with approved material free from large clods and stones, after the pipe lines have been tested and approved.

10.2 Trench backfill shall be placed carefully around and over the piping.

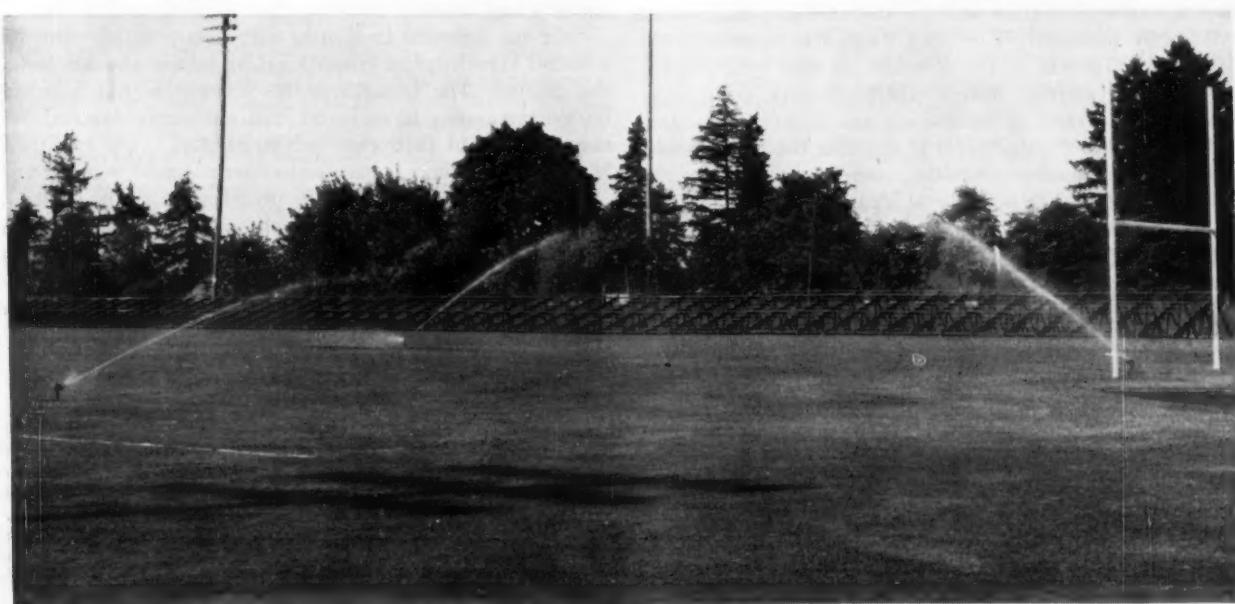
10.3 Each layer shall be thoroughly and carefully rammed until 1 ft. of cover exists over pipe.

10.4 The remainder of the backfill shall be placed, moistened, and compacted.

10.5 The contractor shall refill all backfill areas after they have fully settled.

11. Cleanup

11.1 The contractor shall clean up and dispose of all excess material, trash, wood forms, and other debris.



An athletic field watered adequately by a rotary system

THE AMERICAN School Board Journal

An Independent Periodical of School Administration

William C. Bruce, Editor

TEACHER SHORTAGES

IT HAS been well said that a present liberal solution of a social or economic problem will of itself pose new problems in years to come and will require a new liberal approach and a new solution. The basic principles underlying social situations rarely change, but people and times do change, and the liberal public administrator of today becomes a conservative, if not a reactionary, of tomorrow.

The board of education that adopted a teachers' salary schedule about 1950 and offered the teaching staff a "package" which expressed its best ideas concerning equal pay for equal preparation and experience, cost-of-living adjustments, maximum salaries arrived at in 15 to 20 steps, sick-leave benefits, etc., is confronted with the necessity of completely restudying its 1950 findings and of preparing an entirely new salary "package." Great advances have been made in the character of teachers' salary schedules revised in 1955. Both minimum and maximum salaries have been distinctly increased; the number of steps between the lowest and the highest salaries have been reduced, and sick-leave and pension provisions have been improved. These important changes have been made necessary because of the liberalization of all wage and salary arrangements in industry and in the professions.

If boards of education are determined to meet their serious obligation to help cut down the serious shortage of teachers, which still exceeds 165,000, they must approach the problems of revising salary schedules and developing total work situations with a new conception of the importance of the schools and of teaching as a profession. Primarily, the differential between teachers' salaries and the cost-of-living index must be distinctly increased. That may mean flat raises of \$400 or \$500 at all points in the schedule. It may mean family allowances for married men teachers; it may mean more sympathetic programs of supervision and in-service training. The bulge in school enrollments is reaching the high schools. Small plans for teacher recruiting and for holding present staffs must give way to new liberal ideas.

FOLSOM SUCCEEDS HOBBY

THE resignation of Mrs. Oveta Culp Hobby, early in July, caused little regret among school authorities who have felt for some time that as Secretary of Health, Education, and Welfare, Mrs. Hobby had relatively less interest in the promotion of education than she had in health and general welfare.

The appointment of Marion B. Folsom is hailed as an excellent selection. Mr. Folsom had many years' experience in promoting the welfare of employees of the Eastman Kodak Company, where he was credited with originating the guaranteed annual wage plan and other important employment benefits.

During the past two years he was connected with the

Treasury Department as Undersecretary where he again took a strong interest in welfare matters. It is expected that he will have a keen interest and considerable sympathy for the development of federal services to the public schools.

During the Hobby administration education did not receive the attention or the sympathetic services which school people generally believed it should receive. It will be interesting to observe what changes in policy Mr. Folsom will make.

A TRIBUTE

WRITING under the title, "The City's Debt to Dr. Bills," the editor of the *Kansas City Times* on August 5, said:

"After an unhappy experience in Kansas City, Dr. Mark W. Bills makes a fresh start with the excellent Peoria school system. The earnest wishes of many thousands of Kansas Citians go with him and Mrs. Bills.

"No superintendent has made a finer impression on the Kansas City public and teachers. When Dr. Bills arrived the disastrous short school term was still of recent memory. It symbolized the school system's worst period of public resentment and low teacher morale. Under Dr. Bills we have seen amazing unity among teachers and persons concerned with the schools.

"Except for the explosion of his precipitous resignation last year, Kansas City might have been able to count on his unusual services for many years. For all the efforts to bring the board and superintendent together for a fresh start, that upheaval led directly to the final parting of this spring. The administrative operation couldn't be fully restored. And three board members couldn't forget.

"The primary responsibility for the past situation was on the board members who created the original difficulties. But we never did believe that the internal problems were on a scale to have justified Dr. Bills' resignation. The best of men sometimes do surprising things. However that may be, Kansas City has lost a fine school leader which is Peoria's gain.

"Tens of thousands of Kansas Citians came to feel that they knew Dr. Bills personally. Along with his big job of daily school administration he has been tireless in meeting teacher, parent and general public groups. The warmth of his personality and his deep sincerity have inspired confidence.

"He has appealed to Kansas City as a practical man with a sound knowledge of educational principles and his feet on the ground. The breadth of his knowledge has impressed businessmen who have found him amazingly familiar with the problems of their own industries. And, most effectively, he has related their industries to education.

"Away from the personality problems of dealing with an imperfect board, Dr. Bills has shown outstanding qualities. And there has been sufficient co-ordination between the superintendent and board to give the school system a full measure of progress. For his good leadership and influence Kansas City is in debt to Dr. Bills. We can all join in wishing him a splendid future."

The first duty of the school is to teach the children to do better the desirable things that they are likely to do anyway; another duty of the school is to reveal higher activities and make these both desired and maximally possible. — THOMAS BRIGGS.

The chief responsibility of the schools is to get out of boys and girls what God put in them. A good citizen will use in socially desirable ways all of his God-given talents.

— EX-GOVERNOR AYCOCK, *North Carolina*

Word from Washington

Federal-State Relations in Education

ELAINE EXTON

"In view, however, of the limited time available to us (5 meetings were held for a total of 11 days between June 28 and October 19, 1954), the Committee suggests that further extensive and intensive studies be undertaken to explore more adequately the grave problems confronting American education, and the role which the Federal Government should assume." This, the first recommendation mentioned in the controversial 154-page report of the Commission on Intergovernmental Relations' Education Study Committee,¹ is the one most likely to obtain widespread approval of professional educators.

As early as the fall of 1953, Edgar Fuller, Executive Secretary of the Council of Chief State School Officers, predicted that the Education Study Committee of the Commission on Intergovernmental Relations "will probably be the principal spring-board for efforts to reduce the scope and expanse of Federal programs affecting edu-

cation." When its conclusions were first made known, Worth McClure, Executive Secretary of the American Association of School Administrators, said it was evident the group was "hand-picked and stacked" with persons unsympathetic to Federal aid for schools.

Members of Education Study Committee

Who composed this government body whose federal aid recommendations are quoted below?² Besides the chairman—Adam S. Bennion, Salt Lake City businessman and chairman of the Utah Public School Survey Commission—the members of the Study Committee on Federal Responsibility in the Field of Education consisted of: Thomas C. Boushall, president, The Bank of Virginia and member of the Virginia board of education; Samuel Miller Brownell, U. S. Commissioner of Education; A. Boyd Campbell, chairman, Mississippi School Supply Co.; Alfred E. Driscoll, former Governor of New Jersey and vice-chairman, Commission on Intergovernmental Relations; Oscar A. Ehrhardt, secretary, St. Louis CIO Industrial Union Council and chairman, St. Louis school board.

Also serving in this group were T. Norman Hurd, Director of the Budget, State of New York; Edward H. Litchfield, dean, School of Business and Public Administration, Cornell U.; Carl J. Megel, president, American Federation of Teachers; Mrs. H. M. Mulberry, vice-president, National School Boards Association; Very Rev. Msgr. Thomas J. Quigley, superintendent, Catholic Schools, Diocese of Pittsburgh, and president, Department of Superintendents, National Catholic Educational Association; Hubert H. Race, consultant, Management Consultation Services, General Electric Co.; Roy E. Simpson, California Superintendent of Public Instruction and president, Council of Chief State School Officers (1953-54); Paul D. West, superintendent, Fulton County, Ga., schools and member, Executive Committee, American Association of School Administrators

(1952-54); Henry M. Wriston, president, Brown University.

Interestingly enough, three of these people have been prominently identified with the Education Committee of the Chamber of Commerce of the United States—two as its chairman—A. Boyd Campbell (September, 1950-May, 1955), now chamber president, and Thomas Boushall (1941-46). Mr. Boushall retained a place on this committee for 10 years (1939-49), Hubert Race for seven (1947-54). The Research Adviser to the Bennion Group—Roger A. Freeman—a former controller for the Block Shoe Stores in Seattle, a subsidiary of the Shoe Corporation of America, served on leave from his post as administrative assistant to the Governor of Washington, and Arthur B. Langlie, an outspoken critic of using federal funds for education.

Federal Aid Findings

As will be seen from the following tabulation of the education recommendations of both,³ the Commission on Intergovernmental Relations⁴ did not adopt the extreme views advanced by its Education Study Committee. Its more moderate tone can be largely attributed to the leadership of Meyer Kestnbaum, president of Hart, Schaffner and Marx, Chicago clothing firm, and a member of Citizens for Eisenhower. The President appointed Mr. Kestnbaum chairman of the Commission on Intergovernmental Relations on April 21, 1954, following the resignation of Clarence Manion stemming from his outspoken opposition to administration policies on the Bricker amendment and other issues.

¹ The membership of the Commission on Intergovernmental Relations on June 30, 1955, the date it expired, was as follows: As appointed by President Eisenhower—Meyer Kestnbaum (R), president, Hart, Schaffner and Marx, Commission chairman since April 21, 1954; Alfred E. Driscoll (R), former Governor of New Jersey, Commission vice-chairman; William Anderson (Ind.), professor, Political Science, U. of Minnesota; Lawrence A. Appley (R), president, American Management Association; John S. Battle (D*), former Governor of Virginia; John E. Burton (R), vice-president, Cornell U.; Marion B. Folsom (R), then Under Secretary of the Treasury, now Secretary of Health, Education, and Welfare; Charles Henderson (R), former Mayor of Youngstown, Ohio; Oveta Culp Hobby (D*), Retiring Secretary of Health, Education, and Welfare; Sam H. Jones (D*), former Governor of Louisiana; Clark Kerr (Ind.), chancellor, U. of California; Alice K. Leopold (R), Assistant to the Secretary of Labor for Women's Affairs; Val Peterson (R), Federal Civil Defense Administrator and former Governor of Nebraska; Allan Shivers (D*), Governor of Texas; Dan Thornton (R), former Governor of Colorado; as appointed by the president of the Senate—Sen. Hubert H. Humphrey (D), Minn.; Sen. Alan Bible (D), Nev.; Sen. Wayne Morse (D), Ore.; Sen. Andrew F. Schoepel (R), Kans.; Sen. John M. Butler (R), Md.; as appointed by the Speaker of the House—Rep. John D. Dingell (D), Mich.; Rep. Brooks Hays (D), Ark.; Rep. James I. Dolliver (R), Iowa; Rep. Harold C. Ostertag (R), N. Y.; Rep. Angier L. Goodwin (R), Mass. (The asterisk [*] is used to denote "Eisenhower" Democrats.) In the period intervening since the appointment of this Commission in September, 1953, five changes occurred in the original line-up in addition to the chairman, namely, Rep. Noah M. Mason (R), Ill., who resigned in protest when Clarence Manion did; Sen. Clyde R. Hoey (D), N. C., who died; Sen. Alton Lennon (D), N. C., who replaced Senator Hoey, but like Sen. Robert C. Hendrickson (R), N. J., and Sen. Guy Cordon (R), Ore., failed to return to Congress after the 1954 election. Rep. Goodwin and Senators Bible, Morse, and Butler were named to fill the places vacated by these gentlemen.

² Four members—Oscar A. Ehrhardt, Carl J. Megel, Roy E. Simpson, and Paul D. West declined to sign the Education Committee's report, the last-named three submitting dissenting comments which are included at the close of the study. Two of the signers—Commissioner of Education S. M. Brownell and Very Rev. Msgr. Thomas J. Quigley filed explanatory statements.

³ The 90,000 word *Report of the Commission on Intergovernmental Relations* (\$1.25, paper cover) as well as the 15 separate study committee and staff reports published by this Commission may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. In addition to the *Study Committee Report on Federal Responsibility in the Field of Education* (50 cents), other volumes in this series with material on education programs include the *Study Committee Report on Federal Aid to Agriculture* (20 cents), *A Description of Twenty-Five Federal Grant-in-Aid Programs* (55 cents), *Survey Summaries on The Administrative and Fiscal Impact of Federal Grants-in-Aid* (40 cents).

⁴ The Commission's over-all report was signed by all of its members except Representative John Dingell and Senator Wayne Morse. Congressman Dingell felt he should disassociate himself from the document without prejudice since he was unable to devote sufficient time to Commission activities. Senator Wayne Morse explained in his separate statement of declination "it seemed to me to be very important that the report should have emphasized more than it does in Part I that our constitutional system of Federal and State sovereignty calls for a coordinated approach on the part of the State and Federal Governments on all issues that involved the national interest. . . . It is because I do not think that the report of the Commission gives due emphasis to the rights and jurisdiction of Federal sovereignty that I file this dissent."

GENERAL PUBLIC EDUCATION

Bennion Committee Recommendations

Schools have been a State and local responsibility by long-standing and firmly embedded tradition. They should so remain. We have not been able to find a State which cannot afford to make more money available to its schools or which is economically unable to support an adequate school system.

The general conclusion is that Federal aid is not necessary either for current operating expenses for public schools or for capital expenditures for new school facilities. Local communities and States are able to supply both in accordance with the will of their citizens.

Dissenting Views (Excerpts)

S. M. Brownell, U. S. Commissioner of Education: ". . . It seems to me, too, that in view of the great national interest in education and the critical shortages of school facilities and the many existing restrictions on State and local action, the conclusion is too sweeping. I assume all will agree that if future experience indicates that States and localities cannot meet the need adequately, then the question of Federal aid would have to be reconsidered. I would want it clearly understood that the Committee did not attempt to rule out grants to schools for all time, regardless of circumstances."

Very Rev. Msgr. Thomas J. Quigley, President, Department of Superintendents, National Catholic Educational Association: ". . . The statistics supporting (these conclusions) . . . present a picture quite the opposite of the findings of all previous committees which have investigated this field. Every study group of the past half-century has concluded from statistical premises that there are some States economically unable to support school systems adequate for the needs of American youth and the demands of modern American citizenship. . . . More study is necessary before negating so categorically the earlier recommendations."

Paul D. West, Member, Executive Committee, American Association of School Administrators (1952-54): ". . . With this conclusion I emphatically disagree. . . . Grants-in-aid, whether between States and localities or the Federal Government and the States, appear to be an accepted feature of American government. As with so many other features of our system of government, grants-in-aid have gained acceptance not by satisfying the demands of any particular theory of government, but simply because they have proved workable within the framework of the Constitution."

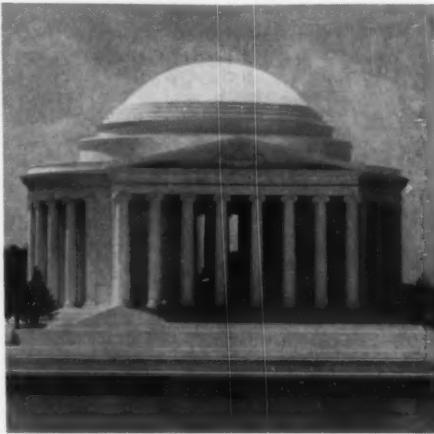
Carl J. Megel, President, American Federation of Teachers: ". . . I cannot agree with (this) general conclusion. . . . Since this conclusion so completely ignores the facts as I have found them to exist in America's schools today . . . Those of us familiar with the problem are well aware that the burden of adequately financing our school system is beyond the capacity of local school districts. The present system of supporting schools by its very structure places the burden on too few people. The Federal Government is the only taxing agency that can equalize and distribute the tax burden for education. Federal aid is the only constructive solution to this national emergency educational problem."

Senators Hubert H. Humphrey and Wayne Morse: ". . . We do not want to associate ourselves with the conclusions of the Commission's Study Committee which would imply no need for Federal aid."

Intergovernmental Relations Commission Report

The commission recommends that responsibility for providing general public education continue to rest squarely upon the states and their political subdivisions. The commission further recommends that the states act vigorously and promptly to discharge their responsibility.

The commission does not recommend a general program of federal financial assistance to elementary and secondary education believing that the states have the capacity to meet their educational requirements. However, where, upon a clear factual finding of need and lack of resources, it is demonstrated that one or more states do not have sufficient tax resources to support an adequate school system, the national government, through some appropriate means,



would be justified in assisting such states temporarily in financing the construction of school facilities — exercising particular caution to avoid interference by the national government in educational processes or programs.

Dissenting Views (Excerpts)

Senators Hubert H. Humphrey, Wayne Morse, and Congressman John D. Dingell: ". . . We believe that the needs of the nation for an educated citizenry and the just claims of every child to a fair chance to get an adequate education outweigh the arguments in favor of complete State and local support for education. . . . We do not feel that the solution to the urgent education needs should be postponed until the States correct their economic and constitutional limitations. We do not believe the Commission is justified in establishing a more rigid standard for a Federal grant-in-aid program in education than it has applied to other programs of lesser importance to the national interest."

SCHOOL LUNCH PROGRAM

Bennion Committee Recommendations

The (school lunch) program is within the sphere of responsibility of the States and school districts and the parents and should be carried by them. It is not a Federal responsibility. Federal participation should be gradually tapered off, as State and local communities demonstrate their ability to assume the cost, and as economic conditions warrant.

Very Rev. Msgr. Thomas J. Quigley, President, Department of Superintendents, National Catholic Educational Association: "I do not subscribe to the recommendation that Federal cash grants to the school lunch

program should be 'tapered off.' The cash grants are still necessary to guarantee a market for surplus farm products. I suggest that the school lunch program be left untouched."

Intergovernmental Relations Commission Report

With respect to Federal assistance to state and local school lunch programs, the Commission recommends (1) the continuation of commodity donations as long as these stocks continue to be acquired and held as surplus by the national government; and (2) the reduction and elimination of cash grants after a reasonable period of time, with the assumption by states, localities, and parents of full responsibility for the cash financing required.

William Anderson, Professor of Political Science, U. of Minnesota, Congressmen James I. Dolliver and Brooks Hayes: "We would go along with (the cash reduction recommendation) . . . if we could be sure that the elimination of these grants would not endanger the whole school lunch program . . . the Federal cash grant may be found to be an indispensable factor in the program's success."

Senators Hubert H. Humphrey and Wayne Morse: ". . . The Federal Government should, therefore, continue to supply cash grants in addition to surplus commodities so as to encourage the expansion of the program. Cash grants are necessary to achieve a balanced program and balanced diets which surplus commodities alone will not afford."

VOCATIONAL EDUCATION

Bennion Committee Recommendation

Vocational education, as all education, is a primary responsibility of States and local governments. There is a continuing interest of the Federal Government in vocational education where a clear national interest is involved.

In the activities which do not specifically contribute to training for defense there should be a tapering off of Federal grants. State and local governments can and should provide from their own funds an adequate vocational program.

In programs where a clear national interest is involved there should be a continuing Federal participation in their financing so that there will be a hard core of Federal responsibility left which could be expanded in times of emergency. Many of the detailed specifications and minute controls of the existing grant-in-aid programs should be eliminated.

U. S. Commissioner of Education S. M. Brownell and Paul D. West, Member, Executive Committee, American Association of School Administrators, (1952-54), recommend six almost identically worded principles which the Commissioner thinks "should govern" such grants as assistance in vocational education and federally affected areas and Superintendent West believes should be observed "where Federal grants-in-aid are given."

Committee on Federal Aid to Agriculture

It is recommended that the United States Department of Agriculture and the United States Office of Education develop jointly and undertake such administrative action as is necessary to reduce conflict and duplication at the county level between the programs sponsoring 4-H and Future Farmers of America (and Future Homemakers of America).

(Continued on page 64)

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WORD FROM WASHINGTON

(Continued from page 62)

Intergovernmental Relations Commission Report

The Commission recommends that legislative action be taken to limit Federal grants-in-aid in behalf of vocational education to subjects vested with a clear and special national interest, and to establish new categories of federal grants only to stimulate forms of training especially important to the national interest. It is further recommended that existing grants not meeting these criteria be eliminated after a reasonable period of time.

William Anderson, Professor of Political Science, U. of Minnesota, and Congressman Brooks Hays: "We accept the recommendation with . . . misgivings. We believe that the major subjects of vocational education now partly supported by Federal grants-in-aid are vested with a sufficient national interest to justify continuation of the grants."

Senators Hubert H. Humphrey, Wayne Morse, and Congressman James I. Dolliver: "In view of the fact that this program was enacted with National initiative and leadership, it would be unwise at this time to abolish or taper off National participation. The 17 per cent Federal contribution is a significant item budgetwise in many of the poorer school districts in rural areas. . . . Since the vocational education program provides scarce vocational skills essential to national defense and the domestic economy, yet reaches less than 50 per cent of the potential clientele, it should be expanded. Not until States have demonstrated their ability to administer such an expanded program should the National

Government consider tapering off its leadership and participation."

SCHOOLS IN FEDERALLY-AFFECTED AREAS

Bennion Committee Recommendations

There is a clear obligation of the Federal Government to make payments toward the construction and operation of schools in areas where Federal activities have led to an influx of children and thereby imposed a special burden upon communities.

Wherever possible the responsibility should be returned to localities as a more adequate tax base is developed.

There will be cases where the Federal Government will have to carry the responsibility permanently because of the particular nature of the situation.

Intergovernmental Relations Commission Report

The Commission recommends that legislative authorization be continued for grants for school construction and operation in Federally-affected areas for such time as the need exists.

SCHOOL CONSTRUCTION

Bennion Committee Recommendations

It is our opinion, however, that the appropriation of relatively small sums of Federal aid for school construction—amounting to 10 per cent or 20 per cent of the present State and local outlay of almost \$2 billion a year—may delay rather than advance school construction. Districts not eligible in 1 year may hold off their building plans on the chance of being able to buy their school houses at 50 cents on the dollar year or two later.

Paul D. West, Member, Executive Committee, American Association of School Administrators (1952-54): ". . . Federal aid is now provided for the construction of roads, hospitals, airports, and other facilities in the area of State and local activity. Schools are working under a handicap if all of their funds must be raised locally or by States while other facilities are partly financed by the Federal Government. If the principle is accepted and continued that the Federal Government participate in the financing of construction of other physical facilities in the State and local area, then it should do likewise for public schools."

Very Rev. Msgr. Thomas J. Quigley, President, Department of Superintendents, National Catholic Educational Association: Also appeals for "parity of position for schools" making the added point that "if the Federal Government does adopt a policy of aid which places the schools on equal footing with other service agencies, it should deal with State Governments and not with local school authorities. Further, it should establish a withholding provision (as in the school lunch program) which would enable private schools to receive an equitable share of such help in States where local constitutional limitations prevent any allocation of funds from the State Government."

Carl J. Megel, President, American Federation of Teachers: ". . . Everywhere boys and girls are going to school in old and dilapidated buildings. Many of the structures are more than 60 years old and some still in use have seen a century or more of service. . . . If we were to build all the school rooms we now need, the total would be equivalent to a building one school room wide, and one school room high which would extend from New York to San Francisco and down to New Orleans. But, grim as this picture is, the situation will continue to grow worse for the next 10 years unless Federal aid is provided to relieve this emergency."

Intergovernmental Relations Commission Report

Therefore, Federal financial assistance to any State should be resorted to only if it becomes clearly evident that such State does not have adequate tax resources to provide adequate physical facilities for elementary and secondary schools. In such cases, Federal financial assistance in the form of loans, loan guarantees, grants-in-aid, or a combination of these devices would be justifiable.

John S. Battle, former Governor of Virginia, and Senator Andrew F. Schoepel: "Should it be determined that any State does not have adequate tax resources to provide proper school facilities, and thus justify assistance from the National Government, such assistance should be by a cash grant rather than by loans or loan guarantees—it is believed it would not promote the cause of education to burden such a State with loan repayments when school operating costs would probably preempt all available State resources."

Alfred E. Driscoll, former Governor of New Jersey, and Charles Henderson, former Mayor of Youngstown, Ohio: "If a grants-in-aid program for capital construction is adopted, it should be limited to those States where need and lack of ability are clearly demonstrated, continued for a clearly prescribed limited period, and on terms that will encourage the State or States receiving assistance to resume their full responsibilities as quickly as possible."

Allan Shivers, Governor of Texas, and Dan Thornton, former Governor of Colorado: Oppose grants-in-aid on any basis.

(Concluded on page 68)

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Also, cabinetwork should be planned for most efficient use. Mutschler sales engineers are specialists in the planning and equipping of school homemaking and foods departments, arts and crafts rooms, and storage areas. This planning help is available at no extra cost when you specify Mutschler.

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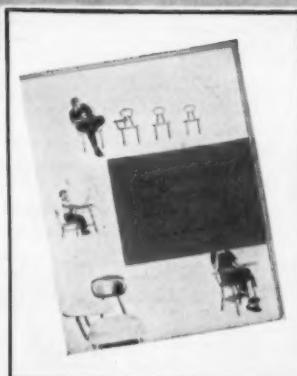
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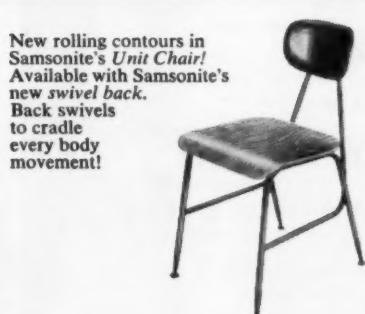
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**WORD FROM
WASHINGTON**
(Concluded from page 64)
PUBLIC LIBRARIES

Bennion Committee Recommendations

The establishment and support of public libraries is a State and local responsibility. It is desirable that States take a more active part in the provision of library service, particularly in the areas which are now inadequately served.

The considerations which apply in determining whether Federal grants-in-aid should be given to public schools for operating expenses should also apply to public libraries.

Having decided that . . . public libraries are primarily a State and local responsibility,

and having reviewed the question of whether or not there is such a compelling national interest involved as to justify action by the Federal Government, we have concluded that there is not.

LAND-GRANT COLLEGES

Committee on Federal Aid to Agriculture

In terms of the principles and criteria used by the Committee in delineating Federal and State responsibilities, the function of land-grant college administration and operation lies clearly within the sphere of the States.

It is recognized that the original purposes of the Federal grants under the Morrill Acts were achieved many years ago—namely the establishment in each State of a land-grant

college. These institutions have long since achieved a strong and secure basis within the governmental framework of each State. Finally it is recognized that the present Federal grant bears no particular relationship to the need of the various States and their respective land-grant institutions nor does it bear any relationship to the fiscal capacity of the various States.

However, in view of (a) the very small magnitude of the grant, (b) the highly satisfactory relationship developed over a long period of time between the Federal Government and the land-grant colleges and (c) the usefulness of the present grant as a benchmark against which the future posture of the Federal Government can be measured in relationship to higher education throughout the country—namely, Federal financial assistance without any trace of Federal control of State educational policies, programs, and processes—no basic change in the present grant is recommended. The Committee emphasizes that this conclusion should not constitute a precedent with regard to the question of Federal financial assistance to education generally.

However, the Committee does recommend consolidating the different pieces of enabling legislation into a single statute so that the administration and accounting of the grant may be simplified at Federal and State levels.

**Intergovernmental Relations
Commission Report**

The Commission recognizes the outstanding success achieved by the grants to land-grant colleges in support of resident instruction. But in the large majority of land-grant institutions, these Federal grants are only a minute fraction of State expenditures. In the fiscal year 1953, Morrill Act funds comprised 10 percent or more of total expenditures for resident instruction in only 8 land-grant institutions. The Commission believes that the way should be opened for using Morrill Act funds in closely related National-State agricultural activities administered by the land-grant colleges. Therefore, it is recommended that Congress authorize the use of Morrill moneys for agricultural research, as well as resident instruction, when the recipient State so desires. Because of the small size of the present grant, the Commission does not recommend that State matching requirements be introduced.

Alfred E. Driscoll, former Governor of New Jersey, Val Peterson, Federal Civil Defense Administrator, and Dan Thornton, former Governor of Colorado: "Do not concur in this recommendation, believing that this grant has fully served its purpose and that in view of the very small amounts involved, the grant should be terminated."

**Impact on State Education
Conferences**

Are their federal aid findings intended to influence the decisions of the State and White House Conferences on Education is another question educators are asking. This possibility is lent credence by the following passage from Chairman Bennion's letter of October 19, 1954, submitting his Committee's report to the Intergovernmental Relations Commission: "The members of the Committee . . . believe that their findings may be helpful to the State Conferences on Education which will be held in the various States within the next 12 months under Public Law 530, 83rd Congress, and recommend that this report be made available to the States as soon as possible."

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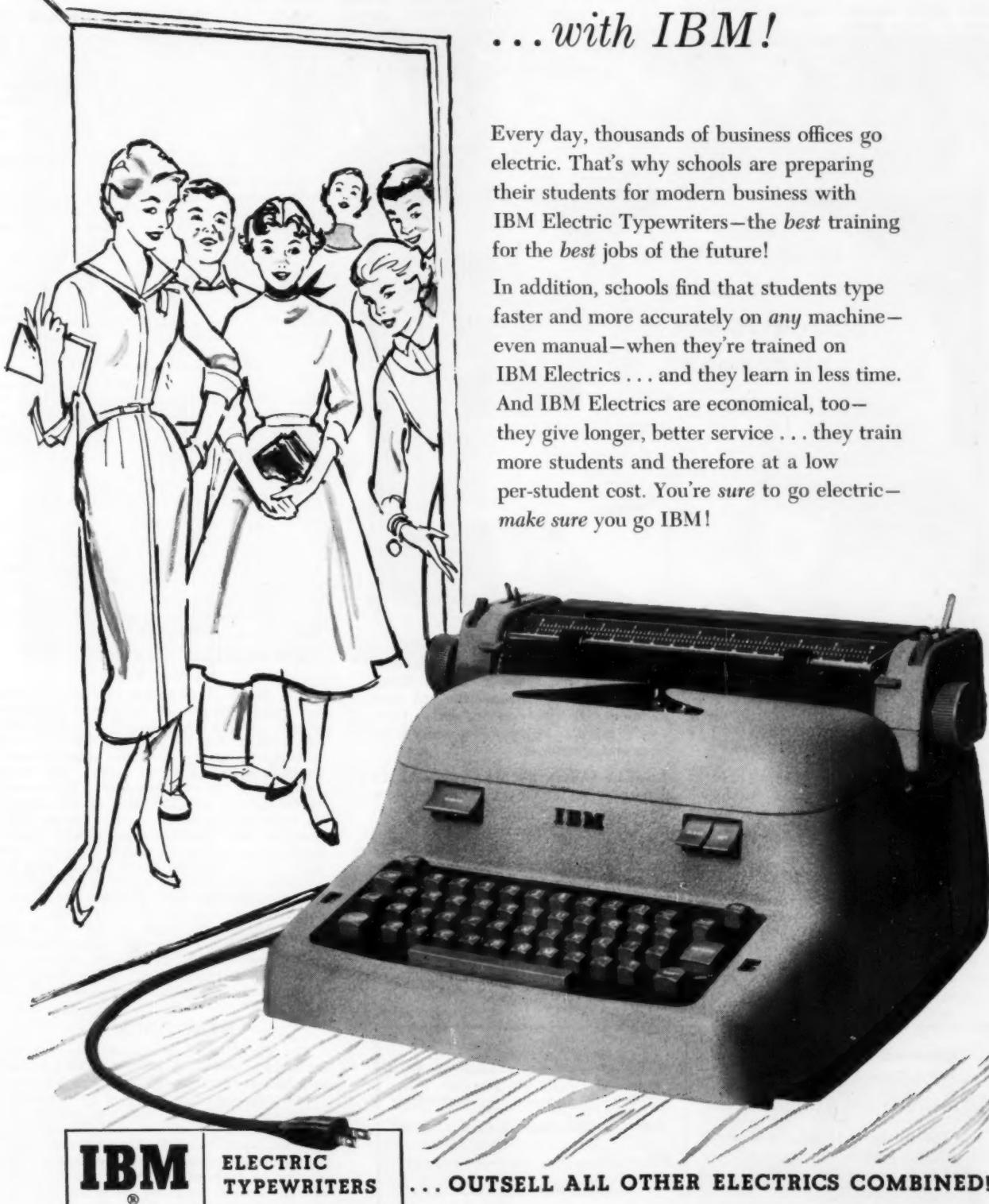
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School Administration News

TEXAS SUPERINTENDENTS

Texas school superintendents are a mobile lot, with most of the turnover found in smaller school districts, according to a University of Texas study.

The typical superintendent has spent less than 10 years in his present position, and the median tenure for all superintendents in the state is seven years. Very large districts hold their superintendents 20 years or longer.

The study revealed that the typical superintendent is 46 years old and has had 11 years' experience as a superintendent, occupying three positions during that career. In

many cases he was promoted from a principalship.

FINE PROGRESS

The school board of Hemet, Calif., in evaluating the school program and the fine progress made during the year 1955, commented on the successful in-service program for the teaching staff, as well as the educational results of the testing program. During the school year, the board was responsible for a successful bond issue campaign of \$750,000, and for the initiation of a building program for both the high and elementary schools.

NEW ADMINISTRATION SETUP

The school board of Houston, Tex., has approved a new administrative setup, giving Supt. W. E. Moreland "supreme authority" in the administration of the schools. Mr. More-

land was given a \$4,500-a-year increase, making his annual salary \$18,000.

HANDICAPPED CENTER

In Sunnyside, Wash., a new handicapped center has been opened, with the employment of a psychologist and a speech therapist. Mrs. Mary Akam is director of the Center. The board has also employed a guidance counselor for boys in the junior and senior high schools.

NEW ATTENDANCE PROGRAM

Opening up what may be a new era in pupil personnel services, a recent New York state law has set up the position of "attendance teacher" rather than "attendance officer." The newly created position demands higher education and experience, including a bachelor's degree and experience in youth guidance and social case work.

In an effort to insure a professional approach to attendance service, this professionally trained personnel will strive to get at the causes of truancy, rather than merely finding the truant child and bringing him back to school. These teachers will be prepared to deal with situations in the child, home, school, or community which may contribute in any way to nonattendance. To rehabilitate many youngsters guilty of absenteeism before they drift into delinquency and crime is the target of this new attendance teacher program.

DOUBLED GROWTH

The Prosser, Wash., Consolidated School District 116 has now more than doubled its school population in the past decade. This has necessitated four new school buildings which have been built at a cost of \$1,140,000. One more building will be constructed within a year.

EXPANSION REVIEWED

The Southern Humboldt Unified School District, Calif., began its eighth year by reviewing its growth since inception in 1948. In that period, the number of pupils has increased from 800 to 2000 and six new schools have been constructed. Gerry O. Steward is chairman of the board and W. Harold Farquhar serves as superintendent.

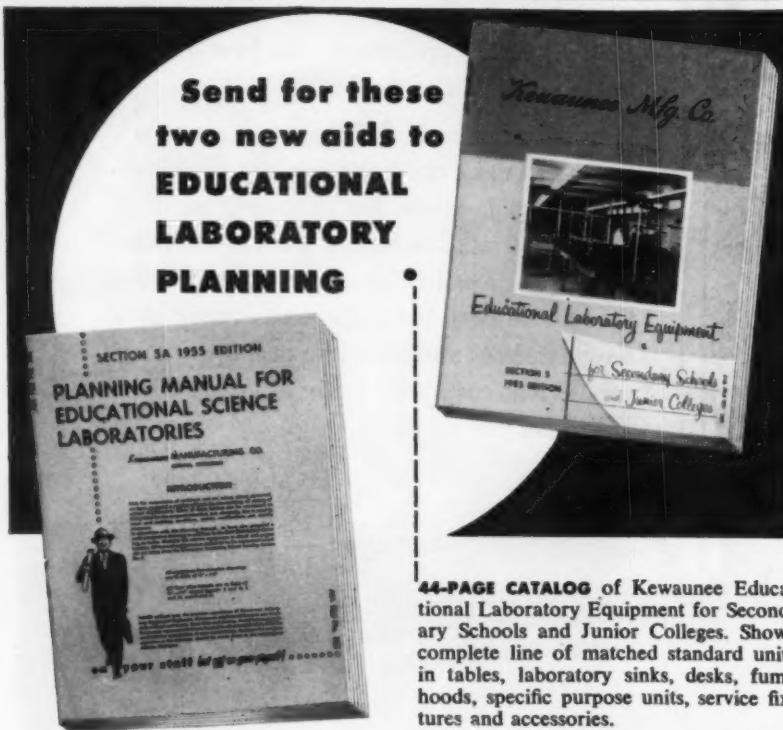
REFRESHER TRAINING FOR TEACHERS

The board of education of Lamar, Colo., has approved a plan for refresher training for members of the school faculty. Teachers with less training than an A.B. degree are required to complete not less than nine quarter hours' credit in a college or university every three years. Six of the nine hours must be received on the campus. Teachers with an A.B. degree, its equal, or an M.A. or M.S. degree, must complete not less than nine quarter hours' credit in a college or university every five years. Six of the nine quarter hours must be received on the campus. Travel is accepted for refresher training only if taken for college credit.

Any teacher who comes to the end of the required refresher training period without having completed the professional training required, will not receive any further salary increments until this deficiency has been removed.

NEW POLICY

The school board of Fulton, Mo., has established a new procedure for more effective and efficient operations of the board. The procedure calls for an agenda for each meeting, to be sent to board members in advance of the meeting, together with the recommendations of Supt. Walter E. Evans. Board members are to be designated in advance of the meeting to look especially into items on the agenda and be prepared to report to the full board.



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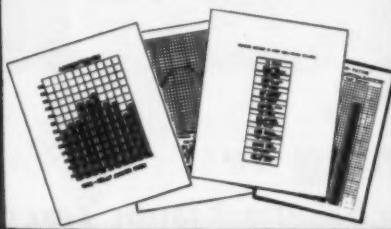
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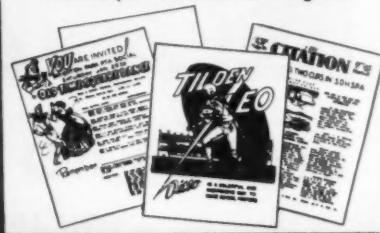
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TEACHERS' SALARIES

CINCINNATI SCHEDULE

The board of education of Cincinnati, Ohio, has adopted a report of the superintendent and the salary committee calling for a new

cluding nondegree teachers, teachers holding a bachelor's degree, teachers holding a degree plus 45 q.h. of college credit, and those having a master's degree.

Teachers in Group begin at \$3,400 and go to \$5,200 in the 13th step. Teachers holding a bachelor's degree start at \$3,700 and go to \$5,500 in the 13th step. Teachers with a bachelor's degree and 45 q.h. of college credit begin at \$3,700 and go to \$5,500 in the 13th step.

★ The school board of Chatham County, Ga., has approved a new salary schedule, giving increases of \$200 to all teachers. Under the schedule, first-year teachers with four years' education, will receive \$2,860, and five-year teachers, \$3,130.

★ Chicago, Ill. Supt. B. C. Willis has recommended that teachers be paid a \$500-a-year increase. The increases will cost an estimated



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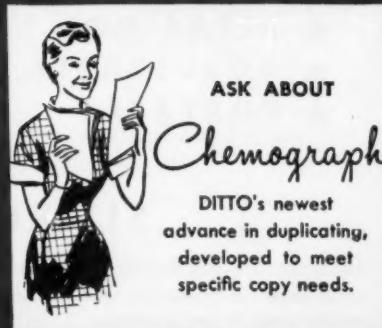


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TEACHERS' SALARIES

CINCINNATI SCHEDULE

The board of education of Cincinnati, Ohio, has adopted a report of the superintendent and the salary committee calling for a new salary schedule, to become effective January 1, 1956. The schedule provides new salaries for classroom teachers and for administrative positions.

The classroom teachers' schedule divides teachers into three groups—Class I, Class II, and Class III teachers. Teachers in Class I begin at \$3,900 and go to \$6,200 in the twelfth year. Teachers in Class II start at \$3,700 and go to \$6,000 in the twelfth year. Teachers in Class III begin at \$3,400 and go to \$4,450 in the seventh year.

WASHINGTON INCREASES

The Washington, D. C., House district subcommittee has approved a pay raise bill, giving most teachers increases of \$100 per year. The sliding scale increases mean that teachers with a bachelor's degree will be given a 13 per cent increase, and those holding a master's degree 9 per cent.

Supt. Hobart Corning's salary was raised to \$16,000, by the device of creating three pay grades for superintendents. A superintendent holding a bachelor's degree will be paid \$14,000; one holding a master's degree, \$16,000; and one with a doctor's degree, \$18,000.

TACOMA SALARY SCHEDULE

The board of education of Tacoma, Wash., has adopted a new salary schedule for the year 1955-56. The schedule contains 13 steps and divides teachers into four groups, in-

cluding nondegree teachers, teachers holding a bachelor's degree, teachers holding a degree plus 45 q.h. of college credit, and those having a master's degree.

Teachers in Group begin at \$3,400 and go to \$5,200 in the 13th step. Teachers holding a bachelor's degree start at \$3,700 and go to \$5,500 in the 13th step. Teachers with a bachelor's degree and 45 q.h. of college credit begin at \$3,850 and go to \$5,650; and those having a master's degree start at \$4,000 and go to \$5,800 in the 13th step.

TUCSON SALARY SCALE

The new salary schedule for teachers in the Tucson, Ariz., public schools allows a starting wage of \$3,600 and a maximum of \$5,900. For those with a master's, the range is from \$3,800 to \$6,100.

CLERICAL SALARY SCHEDULE

The Kalamazoo, Mich., board of education approved a new salary schedule beginning at \$2,200 a year for the office personnel in its school system. In 15 annual steps, a maximum yearly salary of \$4,206 a year can be reached, depending upon education and number of months worked during the school year.

TEACHERS' SALARIES

★ Attleboro, Mass. The school board has approved a new teachers' salary schedule, calling for a minimum of \$3,000, and a maximum of \$5,000, to be reached by increments of \$200 per year. Increments of \$200 are provided for teachers holding a master's or a doctor's degree.

★ Ottumwa, Iowa. The school board has given salary increases of \$200 to all principals and supervisors for the year 1955-56. The maximum salary for elementary principals will be \$5,600; for junior high principals, \$6,100; and for senior high principals, \$7,300.

★ The school board of Chatham County, Ga., has approved a new salary schedule, giving increases of \$200 to all teachers. Under the schedule, first-year teachers with four years' education, will receive \$2,860, and five-year teachers, \$3,130.

★ Chicago, Ill. Supt. B. C. Willis has recommended that teachers be paid a \$500-a-year increase. The increases will cost an estimated 7½ million dollars a year. The \$500 increase would give beginning teachers \$4,000 a year.

★ Plainville, Conn. The school board has adopted a new salary schedule for 1956, calling for salaries of \$3,000 to \$5,000 for teachers holding a bachelor's degree.

★ Louisville, Ky. The board of education has approved a new salary schedule, calling for salary increases of 18 per cent for teachers, supervisors, and other school employees.

Under the schedule, the base pay for new teachers at the two-year level will be \$2,900 per year, with a maximum of \$3,800 after nine years. Teachers holding an A.B. degree will start at \$3,500 and go to a maximum of \$5,400 after 15 years. Those with a master's degree begin at \$3,700 and go to \$5,700 in 16 years. A new provision allows teachers to earn a maximum of \$6,000 annually by working up to a six-year educational level and earning six semester hours of college credits.

★ Columbus, Wis. The school board has adopted a new salary schedule for 1956. The schedule provides a minimum of \$3,200 and a maximum of \$4,950 in 12 years for teachers with a B.A. degree. Those with an M.A. degree will be paid a minimum of \$3,350 and a maximum of \$5,350. An additional payment of \$400 is allowed for married men with dependents.

★ Warwick, R. I. A new salary schedule for teachers, ranging from \$3,200 to \$5,200 has been adopted by the school board for 1955-56.

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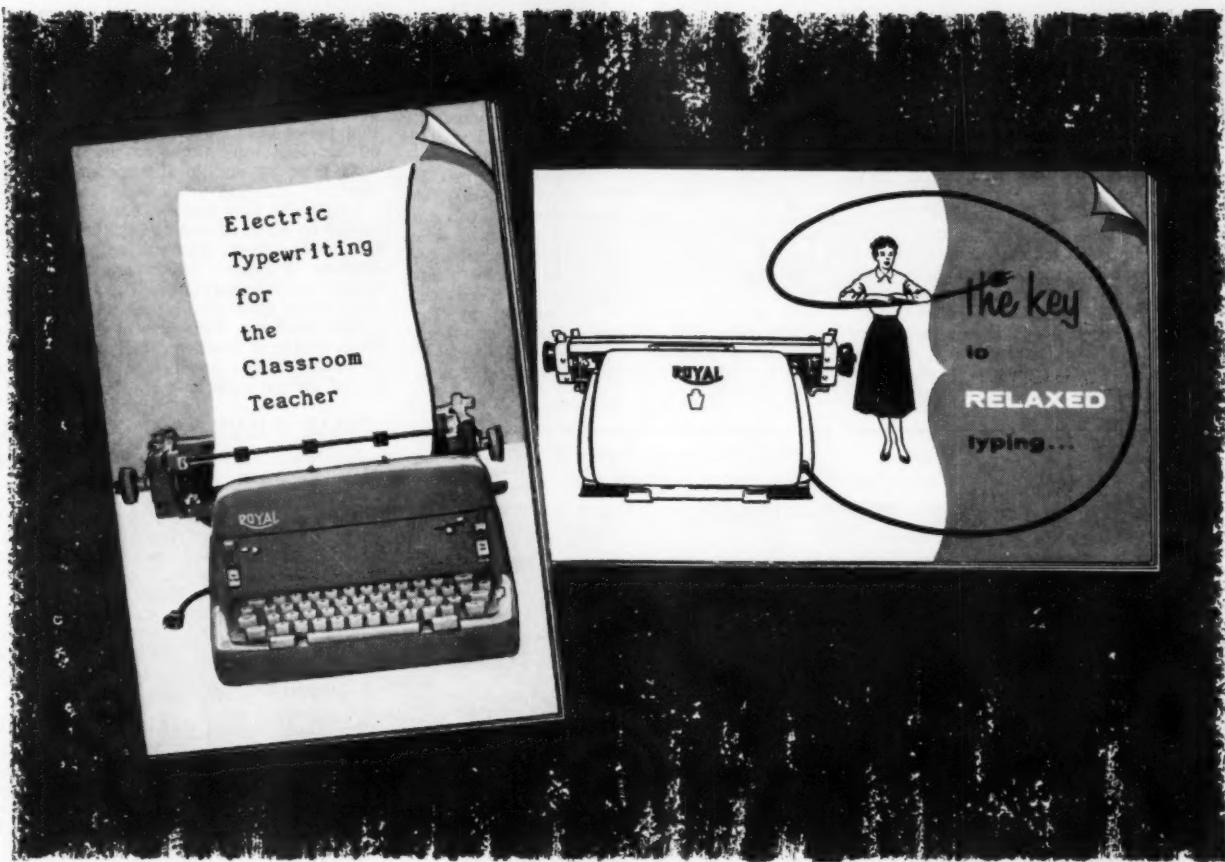
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SCHOOL BUSINESS EXECUTIVES

CONVENTION PROGRAM SET

The program of the 41st Annual Convention of the School Business Officials of the United States and Canada is now determined.

Monday morning the convention will be welcomed by Dr. Benjamin Willis, General Superintendent of Schools in Chicago; and by the Honorable Richard J. Daley, mayor of Chicago. The feature address will be delivered by Dr. Walter Johnson, head of the History Department of the University of

Chicago. Monday afternoon will be devoted to sectional meetings in the fields of accounting, finance, and schoolhouse planning and construction.

Tuesday will be devoted to reports, research, and tours, with the evening inaugurating discussion groups on pertinent educational business management topics, including insurance, the business manager, cafeteria, etc.

Dr. Paul Misner, president of the American Association of School Administrators, will deliver an address on Wednesday morning, while section meetings on purchasing, on maintenance, and on operation will occupy the afternoon. Wednesday evening the annual banquet will be held, featuring an address by Dr. Andrew D. Holt, vice-president of the University of Tennessee.

A final business session will be held Thursday morning.

LAMAR PURCHASING POLICIES

The board of education of Lamar, Colo., has set up new policies to govern the purchase of school supplies. The board reports that prices have stabilized themselves at some 80 per cent over those of the 1943-44 era, with little possibility of appreciable fluctuation.

Under the new policies, sealed bids are required on all purchases of \$300 or over. Members of the board may not sell to the school districts. Purchase orders are regularly required in all transactions. The board reviews and passes upon all bids as well as contemplated purchases. Bills presented for payment after having a voucher attached are certified by at least three members of the board and passed for payment only by their action.

COAL HEAT SAVES DOLLARS

According to a news release of the National Coal Association, the board of education of Yale, Mich., recently undertook a study of heating facilities and found that the automatic fuels left something to be desired and required just as much attention as coal-fired plants. The board's experience with other fuels from an operational, labor, and cost point of view was instrumental in a decision to return to coal. The board found that the use of oil for fuel did not reduce the number of maintenance personnel, since the size of the building actually determines the number of men required.

The board reports that it is satisfied with coal heat. In the high school in 1954-55, the cost for coal for 33,000 square feet of floor space was \$2,469.96, while the small agricultural building with seven classrooms, was heated with coal, at a cost of \$913.51. The cost per room, per year, heated with coal was \$98.78, while the cost per room heated with oil, was \$130.50.

SUPPLY WAREHOUSE

A new warehouse which will provide storage space for the equipment and supplies needed for the El Monte, Calif., school district is being built. It is hoped that by buying in larger lots and storing the supplies in the new warehouse, substantial savings will result. A better check and more efficient distribution is expected to result from the new arrangement.

RED LIGHT FOR BUSES

Missouri school buses must have a flashing red light in front of them, instead of an amber light, under a bill recently signed by Governor Donnelly. The former amber light proved unsuitable because it was mistaken for a mere caution signal by oncoming cars, and they did not stop as required.

SCHOOL BUS PROGRAM

The Kitsap County, Wash., schools are emphasizing school bus safety with a county-wide program to inform motorists about Washington state laws concerning school buses. Approximately 9000 children are transported daily in Kitsap County.

NEW YORK CONFERENCE

"Can We Cut School Building Costs and Still Advance Educational Values?" was the consideration of a conference on school buildings, held July 21 and 22, 1955, at the Levittown Memorial High School, Levittown, N. Y. The conference, sponsored by various New York groups, was organized for the purpose of communicating to school boards, administrators, and citizens' committees recent developments in community involvement, school finance, and school building construction and design.



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The primary purpose of a chalkboard is to convey a message to those students present. Slate, of all chalkboards, communicates best . . . because a white chalk mark on slate produces the desired contrast for instantaneous resolution of a message. Also, the superiority of slate as a uniform writing surface has set it as the standard to which the writing qualities of all other chalkboards are compared. The texture and other physical properties of slate make it easy to clean and maintain . . . virtually indestructible, which results in slate possessing the lowest annual total cost of any type chalkboard.



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No. 282

Both pedestals have pull-out slide shelves. The two top drawers are 6" high x 14" wide x 17" deep. One drawer has 4 removable trays for 5" x 3" cards, the other has 2 removable dividers. The lower file drawer has removable steel bars for hanging letter or legal size file folders. The open book compartment is 11" high x 24" deep. The shelving wing is 66" long x 12" wide x 40" high. Shelf space adjacent to the desk wing is closed with sliding doors in contrasting colors. Standard equipment includes satin chrome hardware and legs with adjustable Protectile glides.



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DR. BUFORD NEW N.E.A. HEAD

John Lester Buford, superintendent of schools at Mt. Vernon, Ill., is the newly elected president of the National Education Association. He succeeds Waurine Walker of Austin, Tex.



John Lester Buford

Born in Dongola, Ill., Mr. Buford is a veteran teacher and administrator of Illinois schools, having served as principal of Johnson City, Ill., Township High School and as city superintendent of Galatia, Ill., schools. He has been at Mt. Vernon since 1937.

Mr. Buford received his bachelor degree from Southern Illinois Normal University and did graduate work at the Universities of Michigan and Illinois. He is 57 years old, married, and the father of three children.

KANSAS CITY N.E.A. COMMITTEE

Dr. Earl T. Wiltse has been appointed chairman of the N.E.A. committee to investigate the dismissal of Supt. Mark Bills, Kansas City. Additional members of the committee will be Supt. John H. Fischer, Baltimore; Dean Harlan L. Hagman, Drake University, Des Moines, Iowa; Miss Clarice Klein, Waukesha, Wis.; Isador Lamuels, member of the Denver, Colorado, school board; Ruth Winters, Detroit, Mich.; and three N.E.A. staff members.

PERSONAL NEWS OF SCHOOL BOARDS

★ A. C. BAKER has been appointed supervising architect for the board of education at Louisville, Ky. He will supervise school projects under construction, prepare plans for maintenance and small school buildings, and supervise the work of other architects planning school buildings.

★ JAMES R. SMITH is the new president of the board at Cartersville, Ga.

★ DONALD D. CUNLIFF has been appointed deputy business manager for the board of education at Los Angeles, Calif. As deputy business manager he takes over the position vacated by S. C. Joyner, who has become business manager.

★ W. S. McMICHAEL, of Quitman, Ga., has been elected president of the Southeastern School Board Association. He is also president of the Georgia School Board Association.

★ The Botetourt county board at Fincastle, Va., has added a new member, ROBERT LAYMAN, who succeeds Ray B. Rader.

★ GEORGE TIPPER, designated the most outstanding school board member in Wisconsin, failed to win reelection to the school district board of Winneconne. He was defeated by Mrs. Herbert Helm.

★ WENDELL GRAY has been elected president of the board at Portland, Ore.

★ E. V. HALLOCK has accepted the superintendency at Bellingham, S. Dak.

★ ROBERT E. LAKEMACHER has been elected district superintendent of schools in Chicago, Ill.



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PLASTICS DIVISION
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★ EDWARD M. SULLIVAN, of Newport, R. I., has been elected superintendent at West Greenwich.

★ WILLIAM B. EDWARDS, of Peoria, Ill., is the new superintendent of schools at Lakewood, Ohio. He

PERSONAL NEWS

PERSONAL NEWS OF SUPERINTENDENTS

- ★ S. L. HELD is the new superintendent of schools at Winthrop, Minn.
- ★ CLWFORD RIDDELBARGER has accepted the superintendency of the Ranchito school district, Ranchito, Calif.
- ★ LOUIS CASS has been elected superintendent at Spring Valley, Minn.
- ★ ROGER AMUNDSON is the new superintendent at Renville, Minn.
- ★ J. N. MCKELL, of Allen, Okla., is the new superintendent at Cromwell, Okla.
- ★ FRISBY D. SMITH, of Midway, Ky., has accepted a position as assistant professor of education in the University of Virginia, Charlottesville.
- ★ THOMAS N. JOHNSTON is the new superintendent at Fulton, Tenn.
- ★ JOHN A. SATER, of Princeton, Minn., is the new superintendent at Thief River Falls.
- ★ WALTER HETZEL has been elected superintendent at Ames, Iowa.
- ★ WALTER HITCHCOCK, of Wilbur, Wash., has been elected superintendent at Moxee, Wash.
- ★ KENNETH G. PARKER is the new superintendent of Dist. No. 60, Barnesville, Minn.
- ★ LAWRENCE A. GRISMER has accepted the superintendency at Grove City, Minn.
- ★ REUBEN R. POSTON, of Marietta, Minn., is the new superintendent at Granada.
- ★ WALLACE L. MUELDER is the new superintendent of schools for the Palm Springs unified school district of Palm Springs, Calif.
- ★ LLOYD W. SEXTON has accepted the superintendency at Cherokee, Iowa.
- ★ DALE L. HANKE succeeds Wesley Hawk as superintendent at Janesville, Minn.
- ★ GRADY A. FINCH is the new superintendent at Blooming Grove, Tex.
- ★ W. H. MILLER has accepted the superintendency at Goodrich, Tex.
- ★ JAMES F. COLLINGS, of Mercer, Mo., has accepted the superintendency at Lancaster.
- ★ STANLEY VEJTASA has succeeded George A. More as superintendent at Mountain Iron, Minn.
- ★ SUPT. HARVEY D. JENSEN, of Winona, Minn., has been re-elected, with a substantial increase in salary.
- ★ CARLTON LYTLE, of Orono, Minn., has accepted the superintendency at Richfield.
- ★ ANTHONY MARINACCO, of Mexico, Mo., has taken the superintendency at Kankakee, Ill.
- ★ BILL ANDREAS is the new superintendent at Salida, Colo.
- ★ LEROY NORSTED, of Round Lake, Minn., is the new superintendent at Lakeville.
- ★ D. D. DUNLAVY, of Corning, Iowa, has taken the superintendency at Decorah.
- ★ DR. MALCOLM B. ROGERS, of Meriden, Conn., has accepted a position as associate professor of school administration in the University of Connecticut.
- ★ DANIEL RUSS is the new superintendent of schools at Stinnett, Tex.
- ★ RICHARD L. BEHREND has accepted the superintendency at Hebron, Neb.
- ★ DON A. BLAKELY, of Paul, Idaho, has accepted the superintendency of Mackey Class B School, Dist. No. 182.
- ★ FLOYD TEMPLE is the new superintendent at Hanska, Minn.
- ★ LESTER GILMAN has taken the superintendency at Carthage, Mo.
- ★ BENTON YATES is the new superintendent at Livonia, Mich.
- ★ DELOS D. WILLIAMS, of Silverton, Ore., is the new superintendent at Brookings.
- ★ JIM SMALLING is the new superintendent of the Arnett School at Hollis, Okla.
- ★ HARRY WEIR, of Hallcock, Minn., has been elected superintendent at Havana, N. Dak.
- ★ FLOYD SALISBURY, of Vallejo, Calif., has accepted the superintendency of Dixon unified school district, Dixon, Calif.
- ★ GARLAND BLACK is the new superintendent of schools at Bronte, Tex.
- ★ H. L. IDLEMAN, superintendent of schools at Keyser, W. Va., for 14 years, retired from that position on July 1. Mr. Idleman is succeeded by S. T. McGee.
- ★ SUPT. K. P. MALLERY, of Sunnyside, Wash., has recently completed graduate work in college leading to a doctor's degree. He took for his doctoral dissertation the subject, "School Board Policies in the Northwest."



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FLORIDA, Tampa, PO 2189 Universal Concrete Pipe Co.	NEW YORK, Buffalo 6 Anchor Concrete Products, Inc.	WEST VIRGINIA, Wheeling Universal Concrete Pipe Co.
ILLINOIS, Franklin Park, PO 277 Mid-West Concrete Pipe Co.	NORTH CAROLINA, Lilesville W. R. Bonsai Company, Inc.	WISCONSIN, Beloit, PO 325 Mid-States Concrete Products Co.
INDIANA, E. Chicago, PO 539 Calumet Flexicore Corporation	OHIO, Columbus 22 Arrowcrete Corporation	CANADA, —Toronto, Ontario Murray Associates, Limited
LOUISIANA Baton Rouge, PO 1107 Louisiana Concrete Products, Inc.	OHIO, Dayton 1, PO 825 Price Brothers Company	CANADA, Montreal, Quebec Creaghan & Archibald Ltd.
	PENNSYLVANIA, Monongahela Pittsburgh Flexicore Company	PUERTO RICO, Rio Piedras Flexicore Co. of Puerto Rico

PERSONAL NEWS

★ R. E. HICKS, of Linn, Mo., has been elected superintendent of the high school department at the School of the Ozarks.

★ DAMON E. COLE, of Laurens, Iowa, has accepted the superintendency of the Vernon consolidated school at Renwick.

★ O. T. BECK, of White Oak, Okla., has assumed the superintendency at Porter.

★ FLOYD W. HENDRICKS is the new superintendent of grade schools at Pekin, Ill.

★ SPENCER WYATT has accepted the superintendency at Cokeville, Wyo.

★ LESTER GILMAN has assumed the superintendency at Carthage, Mo.

★ GORDON K. PEKAREK is the new superintendent at Byers, Kans.

★ E. V. HALLOCK has accepted the superintendency at Bellingham, S. Dak.

★ ROBERT E. LAKEMACHER has been elected district superintendent of schools in Chicago, Ill.

★ ROBERT C. McCAGHILL has been elected administrative assistant at Lynwood, Calif. LOUIS A. THOMPSON was named director of elementary education.

★ DEAN DOBBINS, of Billings, Mo., has accepted the superintendency at Elkland.

★ JAMES W. MARTIN is the new superintendent at Arlington, Tex.

★ N. W. SEVERSON, of Ames, Iowa, has accepted the superintendency at Parkersburg.

★ REX TURNER has been elected superintendent of the Sequoia Union High School District at Redlands, Calif.

★ WILLIAM BECKMAN is the new superintendent at Alcester, S. Dak.

★ CHARLES CARUSO, of Wilmot, Ill., is the new superintendent at Deerfield.

★ L. N. JENSEN, of Primghar, Iowa, has accepted the superintendency at Waverly.

★ EDWARD M. SULLIVAN, of Newport, R. I., has been elected superintendent at West Greenwich.

★ WILLIAM B. EDWARDS, of Peoria, Ill., is the new superintendent of schools at Lakewood, Ohio. He succeeds Martin Essex who goes to Akron.

★ SUPT. CLAUDE V. COURTER, of Cincinnati, Ohio, has been re-elected for a three-year term, with a substantial increase in salary.

★ J. E. PATTON, of Steger, Ill., has accepted the superintendency of Dist. 170, Chicago Heights.

★ RICHARD H. WOOLSON, superintendent of the Wall township schools, near Asbury Park, N. J., died after a short illness, at the age of 58.

★ DONALD MATTHEWS, former assistant to the Dallas, Tex. superintendent of schools and director of public relations, has been named assistant superintendent.

Personal News of School Boards

★ JOSEPH GUNDERSON is the new president of the school board of Dist. 38, Albert Lea, Minn. New members of the board are TED R. MUNSON, DR. CLAYTON E. J. NELSON.

★ MRS. OSA McALLISTER has been re-elected president of the board at Alhambra, Calif.

★ GLENN E. WIXON has been re-elected president of the board of trustees of the Thermalito Union School Dist., Oroville, Calif. BETH GIBBS has been re-elected as school clerk.

★ J. E. MARTIN has been elected manager and finance officer for the school board at Brookings, S. Dak.

★ JAMES W. LEE II is the new president of the board at Grosse Pointe, Mich.; FRANIE D. DOUGHERTY is secretary; and ROBERT F. WEBER is treasurer.

★ At Yoder, Ore., four members of the board have been elected. GLEN YODER, U. ROTH, DONALD THACKING, and INGWALD LINLAND are the new members. CLIFFORD ECKLUND serves as chairman, and Mrs. LORIN WROLSTAD is clerk.

★ MRS. RUTH C. COLE has been elected president of the board at Los Angeles, Calif. MRS. GEORGIANA HARDY is the new member of the board.

★ MRS. BETTY S. BECKER is the new president of the seven-member board at Detroit, Mich.

★ KLEO H. GILDNER has been re-elected chairman of the board at Austin, Minn.

★ The Moorhead, Minn., board has reorganized with G. R. JACOBSON as chairman, CHARLES STEVER as clerk, and C. R. FRIDLUND as treasurer.

★ FREDERICK M. BOURLAND is the new president of the board at Peoria, Ill. GEORGE MILES was elected vice-president. ROBERT A. JAMIESON is the new member of the board.

★ G. J. HIPKE has been re-elected clerk of the school board at New Holstein, Wis.

★ LLOYD ADERHOLD has been elected for another three-year term on the board at Stratford, Wis. LAWRENCE LEICK was named to succeed A. L. McKnight.

★ The school board of Janesville, Wis., has reorganized with KENNETH R. DECKER as president; JAMES UMHOEFER as vice-president; and VERNON E. KLONTZ as clerk.

★ IRVING J. GROSBIER has been re-elected president of the board at Rhinelander, Wis. MRS. KERMIT STROEDE was named vice-president, and BERNICE STRAUB, treasurer.

★ DONALD MELBY is the new president of the board at Santa Maria, Calif.

★ The school board at Three Rivers, Mich., has reorganized with DR. STANLEY C. PENZOTTI as president; SYBERT N. CROSE as vice-president; and WILLIAM R. MONROE, treasurer.

★ JAMES HALLAN is the new president of the board at Holland, Mich. MRS. JOHN K. WINTER was named vice-president, and MRS. DOROTHY HORNBAKER, treasurer.

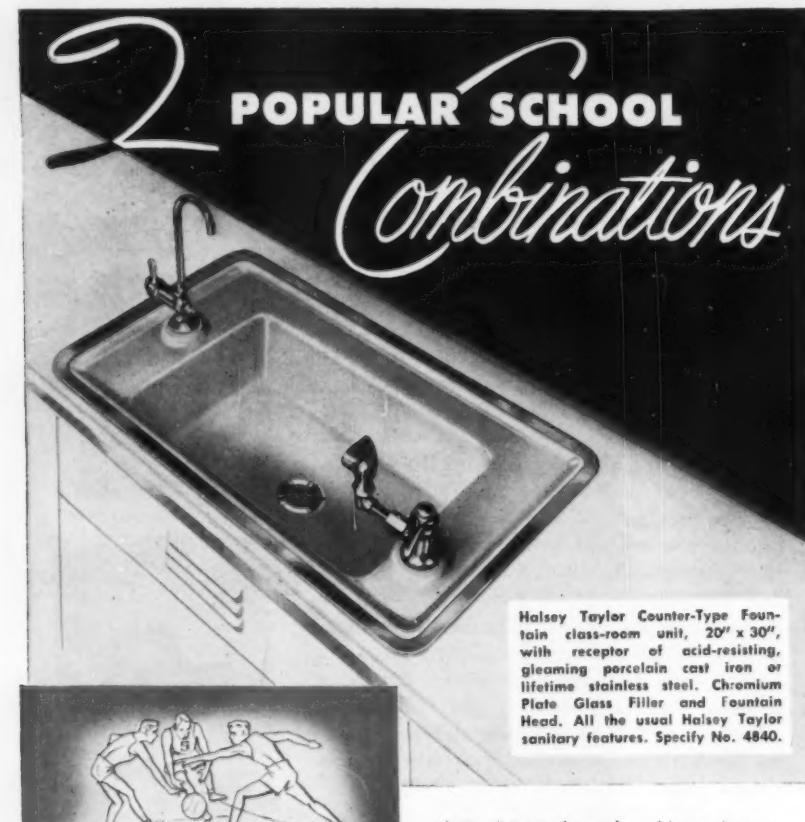
★ GEORGE JENSEN has been elected president of the board at Minneapolis, Minn.

★ KRUG CYPHERT has been elected president of the board at Ypsilanti, Mich.

CHICAGO APPOINTMENTS

Named to the newly created rank of associate superintendent in the Chicago city school system are four assistant superintendents. James R. Smith, who is in charge of instruction for half the city; Thaddeus J. Lubera, who is supervisor of the other half; Don C. Rogers, who is associate for administration and research; Edwin A. Lederer, who is associate in charge of operational services. Alfred E. Bolt is associate in charge of school finance. As part of the reorganization plan, the present 10 assistant superintendents have been reclassified as five associates and five assistants.

SCHOOL BOARD JOURNAL for SEPTEMBER, 1955



Halsey Taylor Counter-Type Fountain class-room unit, 20" x 30", with receptor of acid-resisting, gleaming porcelain cast iron or lifetime stainless steel. Chromium Plate Glass Filler and Fountain Head. All the usual Halsey Taylor sanitary features. Specify No. 4840.



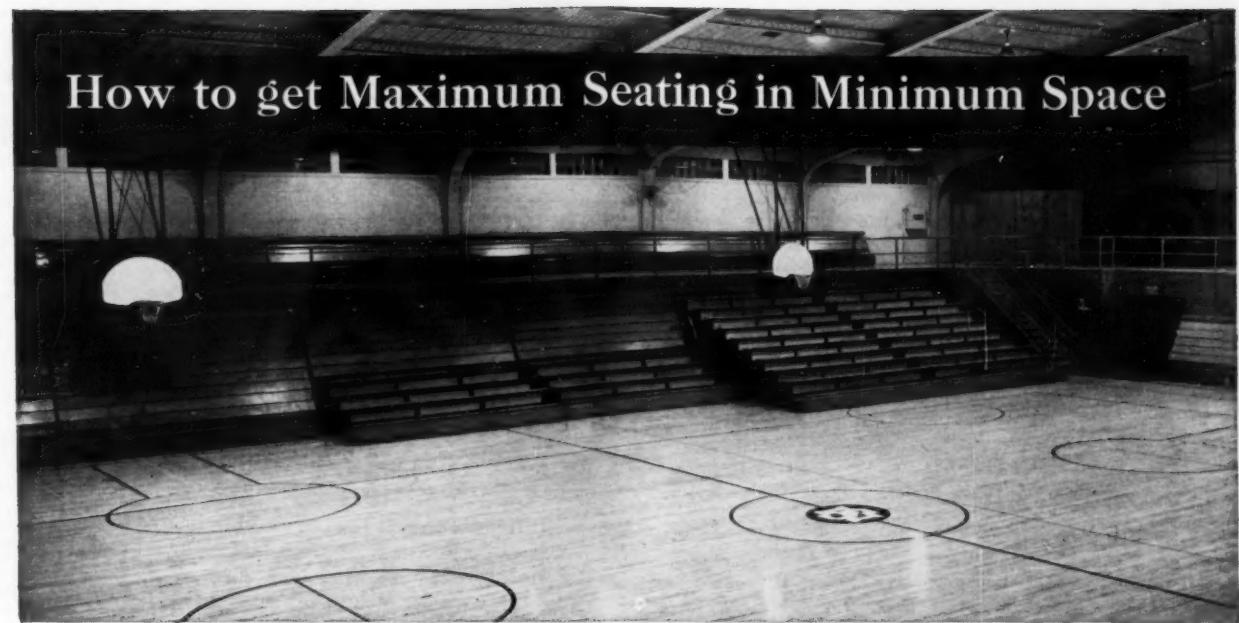
School boards and architects know that to specify Halsey Taylor drinking-water equipment is to provide the utmost in sanitation as well as trouble-free maintenance. Every Halsey Taylor product—whether fountain or cooler—is factory-tested for dependability in service . . . backed by years of specialization in manufacturing this type of equipment exclusively.

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AS-40

This is an ideal combination for "gym" or athletic areas. The Halsey Taylor recessed Cuspidor, No. 4647, shown at right, is designed to be used with No. 4646 recessed wall type, shown at left. Special outlet supplies water to flushing jet of cuspidor. Semi-recessed models also available.



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Just ask for a seat demonstration of *Universal Roll-A-Way* Stands. Then you'll see and appreciate what we mean by maximum spectator comfort... in minimum space.

Notice the spectator's natural, comfortable position while seated. Make all the tests you wish, with feet forward or drawn back under the seats. Get out the slide rule and compute the actual area (or we'll do it for you). Compare design, construction, dimensions, and you'll find that...



Universal Roll-A-Way Stands

provide more cubic inches of comfortable leg room below seat board levels than any other stands... with either 22" or 24" row spacing.

The extra distance from seat board to foot board (18½") and the position of the vertical filler or riser board (centered under seat) assure maximum space per spectator... permitting normal position of feet drawn back under seats. Compare this with other stands which have 2" or 3" less space and vertical filler boards flush with seat fronts. Write today for free catalog.

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SCHOOL FINANCE AND TAXATION

SCHOOL BOND SALES

During the month of June, 1955, permanent school bonds for school construction purposes were sold in the amount of \$133,008,395. The largest sales were made in:

California	\$13,890,500	New Jersey	\$ 6,094,000
Illinois	5,395,000	New Mexico	2,975,000
Maryland	16,000,000	New York	25,580,000
Massachusetts	3,983,000	Ohio	3,207,000
Michigan	8,538,000	Oregon	2,953,000
Minnesota	5,255,000	Texas	8,667,000

As of August 1, the average yield of 20 bonds was 2.58 per cent.

SCHOOL BUILDING CONSTRUCTION

During the month of July, contracts were let in 11 Pacific Coast states, for 107 school buildings, to cost \$62,101,092. Further projects, in the number of 154, were reported in preliminary stages, at an estimated evaluation of \$79,042,634.

Dodge reported contracts let in July, 1955, for 1087 school buildings in 37 Eastern States at a contract value of \$231,242,000.

SCHOOL BUDGETS

- ★ Mesa, Ariz. Adopted \$2,460,575.
- ★ Tucson, Ariz. Approved \$9,276,314.
- ★ Phoenix, Ariz. Adopted \$7,070,635, an increase of \$890,000.
- ★ Temple City, Calif. Approved \$1,128,627 for 1955-56.
- ★ Muskegon, Mich. Adopted \$3,111,304 for 1955-56, an increase of \$43,672.

NATIONAL STATISTICS OF IMPORTANCE TO SCHOOLS*			
Item	Date	Latest Figure	Previous Mo.
School Building Construction ¹	July, 1955	\$231,242,000	\$180,928,000
School Building Construction ²	July, 1955	62,101,092	46,438,763
Total School Bond Sales ³	June, 1955	133,008,395	110,892,930
Latest Price, Twenty Bonds ⁴	August 4	2.58%	2.41%
New Construction Expenditures ⁵	June, 1955	260,000,000	243,000,000
Construction Cost Index ⁶	July, 1955	611	604
Educational Building Permits, Valuation ⁷	April, 1955	42,400,000	127,300,000
Wholesale Price Index ⁸	July 19	110.0	110.3
U. S. Consumer's Prices ⁹	June, 1955	114.2	114.2
Total Population of the U. S. ⁷	June 1, 1955	165,250,000	164,799,000
Total City Expenditures for Education ⁸	For Year 1954	1,027,000,000	
Total City Expenditures for City-Operated Schools ⁸	For Year 1954	986,000,000	

*Compiled August 8, 1955.

¹Dodge figure for 37 states east of Rocky Mts.

²21 states west of Rocky Mts.

³Bond Buyer.

⁴Joint estimate, Depts. of Commerce and Labor.

⁵American Appraisal Co., Milwaukee.

⁶U. S. Dept. of Labor.

⁷U. S. Dept. of Commerce.

⁸Joint summary, City Government Finances, 1954, Depts. of Commerce and Census.

★ Sacramento, Calif. Adopted \$11,118,650 for 1955-56.

★ Boise, Idaho. Approved \$3,823,724.

★ Salt Lake City, Utah. Adopted \$15,000,000 for 1955-56.

★ Chattanooga, Tenn. Approved \$5,582,690, an increase of \$1,364,631.

★ Stockton, Calif. Adopted \$8,517,178.

★ Los Angeles, Calif. Approved \$148,985,555, an increase of \$10,043,164.

★ San Bernardino, Calif. The school board has set up a budget of \$8,316,449 for 1955-56.

★ Providence, R. I. Adopted \$8,530,000 for the year 1955-56.

★ Birmingham, Mich. The school board has called a school election to approve a \$5,500,000 bond issue for new school projects. The program calls for five elementary schools, additions to five existing schools, and completion of modernization programs at two high schools.

★ Voters in 74 school districts in 29 Washington counties, have approved ten bond issues, totaling \$2,092,000. Special levies to raise \$2,120,000 for kindergartens were also approved.

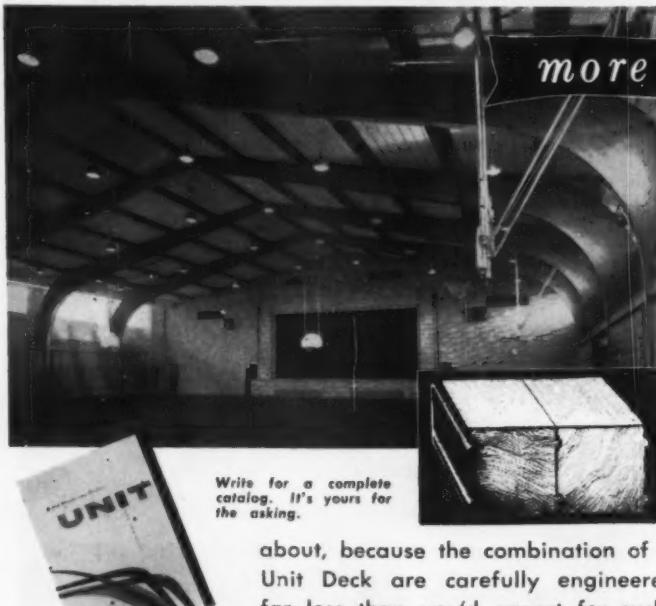
★ Sioux Falls, S. Dak. The school board has called an election to vote \$2,000,000 in school bonds for school construction.

★ Hyde Park, N. Y. Adopted \$1,088,029 for 1955-56. The largest item is \$650,418 for instructional service. Auxiliary agencies will cost \$131,970. Capital outlay calls for \$19,172.

★ Covington, La. St. Tammany parish has sold a 2½ million dollar bond issue, the proceeds to be used for new school construction.

★ The Hunterdon, N. J., school district has borrowed \$2,060,000 on an issue of serial bonds. The bid was 100.151 for obligations bearing 2½ per cent interest.

★ Tacoma, Wash. Voters have approved \$8,267,000 bond issue for school construction purposes.



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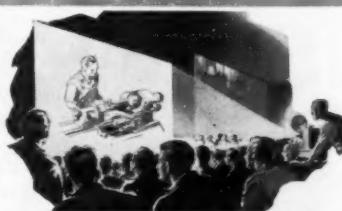
terial on specialized operations. 25c per copy.

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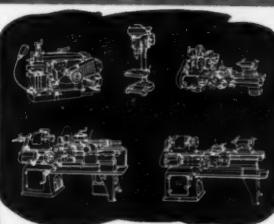
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SCHOOL BOARD NEWS

SICK-LEAVE PLAN

The school board of Hannibal, Mo., recently voted to inaugurate a new sick-leave program, allowing the accumulation of five days each year for ten years, to a maximum of 50 days, with the present accumulated leave as a base.

POWERS STRIPPED FROM STATE GROUP

The Nebraska State Supreme Court, in a recent decision, has stripped the powers of the State School Reorganization Committee to veto proposals for redistricting. State Com-

missioner Decker said that the decision sets back school organization in the state many years. He said that removal of state control may bring a siege of small reorganization plans. Such plans are often submitted by land owners to head off a larger and more sane reorganization.

LEADER IN ENROLLMENT

California has moved ahead of all other states in elementary and secondary school enrollments, according to the State Education Department.

Roy E. Simpson, State Superintendent, places the number of students in all schools at 2,332,021, as of last June. This is an increase of 163,659 over last year. The figure represents 21,500 more students than in New York which dropped to second place.

Elementary school enrollments alone totaled 1,785,353, and high schools, 469,449.

WORK-STUDY GAINS

A total of 4000 students from 36 high schools in New York City participated last year in the work-study plan, which was originated forty years ago. Miss Grace Brennan, director of the program, in her annual report, said that a conservative estimate would indicate that 25,000 students have been graduated from co-operative classes since 1915. In the past 25 years alone, these students earned approximately \$20,000,000.

VOCATIONAL EDUCATION

Congress has voted an appropriation of \$26,500,000 for aid under the George-Bardean law to vocational education during the fiscal year 1956. There will also be available during the same year, under the Smith-Hughes law, \$3,034,434 for trades and home economics; \$3,014,662 for agriculture; \$1,089,233 for vocational teacher training. The action of Congress reverses the trend of annual reductions recommended by President Eisenhower.

ACCOUNTING SYSTEM

At the request of its auditors, the board of education of Lamar, Colo., in 1944 installed a new accounting system, which has added much to the efficiency of the accounting department, under the able direction of Jesse Nelson and Charles Hudgins.

The system provides separate duplicate receipt books for each school district and the color and form of the school warrants has been changed to facilitate recording and payment by the county treasurer. All cash receipts are recorded in a general journal each month and a small petty cash fund has been set up from which small bills are paid.

Under the system, it has been possible to raise the over-all economy of the administration of the sundry accounts. A complete breakdown of expenditures against budgeted accounts is possible for each building and the various departments in each. This facilitates monthly and quarterly financial reports to the teachers, board members, and school patrons.

A yearly audit is made of all funds of the public schools and these reports are made available for public inspection at all times. Auditing firms are changed every three years as a board policy.

FAIRFAX PROGRAM

The Fairfax County, Va., board of education is completing a large school building program, to cost a little more than \$29,000,000. The program is being financed with a bond issue of \$21,500,000 and other money provided by state and federal grants.

A total of seven new elementary schools and one secondary school were opened in September. These projects are part of the program, begun in 1951 and to be continued through 1955.

The county board has also approved a new five-year building program for 1956-60. It is expected that another referendum vote will be conducted October 1, 1955 for about \$25,000,000. The money will be used to construct new schools to house 15,000 additional pupils expected by 1960 and to improve the general educational program.

DR. BILLS TO PEORIA

Dr. Mark Bills, recently of Kansas City, Mo., has been elected superintendent of schools at Peoria, Ill. His contract, which is dated as of September 1, is for three years, at an annual salary of \$16,000, for the first year, and \$1,000-per-year increases annually thereafter.

The Peoria board employed Dr. Bills while the NEA probe, concerning the refusal of the Kansas City board to renew his contract, was under way.

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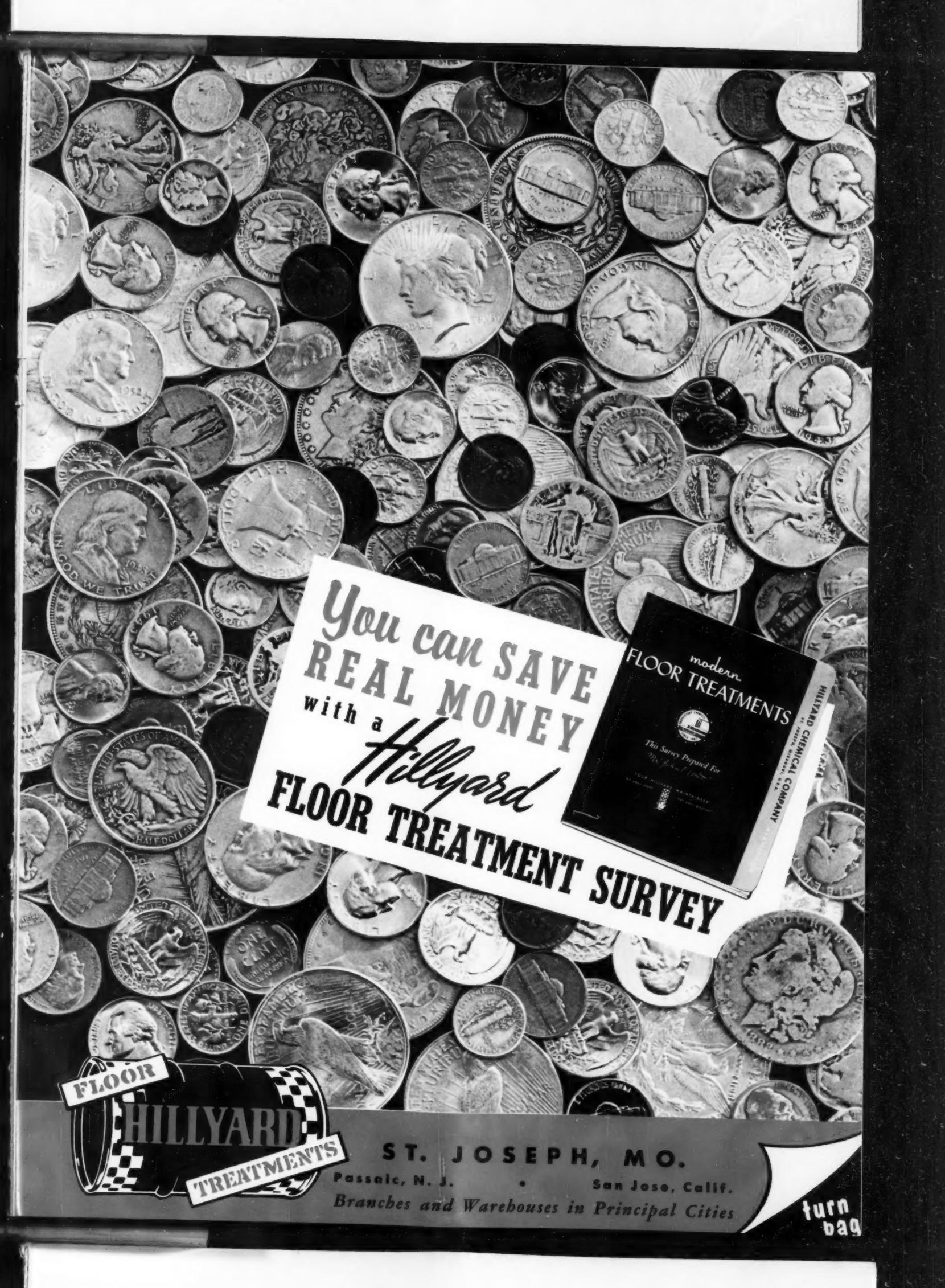
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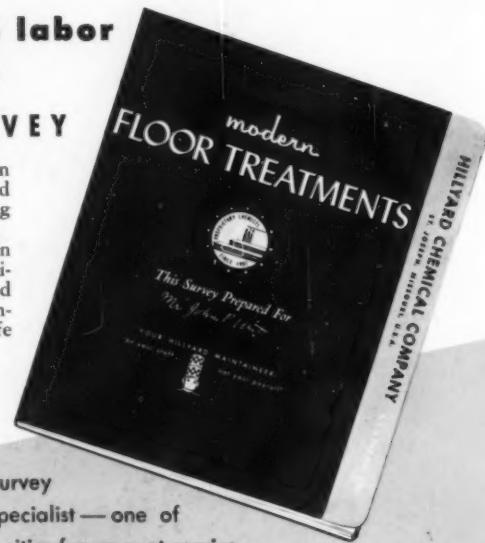
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PUBLICATIONS FOR SCHOOL BUSINESS EXECUTIVES

The State and Education

The Structure and Control of Public Education. Compiled by Dr. Fred F. Beach and Robert F. Will. Paper, 175 pp., \$1. U. S. Office of Education, Washington 25, D. C.

This study provides an analysis of the structure and control of public education as provided by the laws and the administrative machinery at the state level. Based primarily on the detailed statutes and the session laws, each state account includes a basic statement of facts, a structure chart, and supplementary information to make the situation in the state clear. Introductory chapters outline the policy-making and management functions of the state officers and state boards. The most important concluding chapters reflect trends and tendencies which at present are causing state school controls to be vested in a state board of education so far as the common schools are concerned, and in a state board of colleges for higher education.

Financing Metropolitan Government

A Symposium. By 23 Tax Officials and Others. Cloth, 295 pp., \$5. Tax Institute, Inc., Princeton, N. J.

Metropolitan areas comprise 7 per cent of the land area of the U. S., 84.6 million people, 16,210 local governments, 7864 school districts. The problems of taxation, budgeting, and fiscal administration of these areas is stupendous as these studies and discussions clearly indicate. The viewpoints throughout the book are those of general municipal and state taxing and fiscal authorities. The following excerpts from a paper by Dr. Lennox L. Moak pretty well reflect the attitude of these men:

"It would not be appropriate to leave this subject of 'shortage' without some comment upon the matter of standards to which we accustom ourselves. It has always seemed strangely incongruous to me that in our educational system—particularly at the public school level—we seem to be able to afford collectively that which few of us can afford individually. We seem to be able to afford a capital investment on a per capita use basis for our schools far in excess of what the same people are able to afford as an investment on a per capita use basis for their homes, in which about seven times as many family hours are spent as in the school's."

"The public school people have accomplished one of the minor, or perhaps major, miracles in our time. On the one hand, they have succeeded in state after state in having the state government assume the responsibility for the public school 'deficit'—and this deficit in some states far outdistances the local contribution in support of schools. Simultaneously, they have been able to preserve to the local school boards remarkable autonomy in the determination of the level of local education and frequently have been so ingenious as to provide systems such that the local board decides the level, limits its own financial participation, and sends the bill for the remainder to the state.

"Grants-in-aid in other fields have not proceeded so far on so many fronts as in the public school field."

Current Expenditures

Per Pupil in Public School Systems: Large Cities, 1953-54. By Lester B. Herlihy and Emory M. Foster. Paper, 32 pp., 25 cents. U. S. Department of Health, Education, and Welfare, Washington, D. C.

This booklet furnishes "school officials, particularly superintendents, finance officers, business managers, and research personnel with information on the spending practices and expenditures patterns of public urban school systems."

Current Expenditures

Per Pupil in Public School Systems: Small and Medium-Sized Cities, 1953-54. Paper, 32 pp., 30 cents. U. S. Department of Health, Education, and Welfare, Washington, D. C.

A companion booklet to the analysis of current expenditures in large cities that presents per pupil expenditures in school systems of cities with population between 2500 and 25,000.

Statistics of City School Systems

Staff, Pupils, and Finances, 1951-52. By Lester B. Herlihy and Emory M. Foster. Paper, 144 pp., 45 cents. U. S. Department of Health, Education, and Welfare, Washington, D. C.

Chapter III of the *Biennial Survey of Education*

continues the regular series of reports on the statistics of city school systems, published by the U. S. Office of Education. It presents, statistically, the status of city schools during 1951-52, reviewing the major changes which have occurred over the nation during the past decade or longer.

Public School Finance Programs, 1953-54

Compiled by Clayton D. Hutchins and Albert R. Munse. Paper, 251 pp., \$1.50. Bulletin No. 22, 1954. U. S. Office of Education, Washington 25, D. C.

This report which supplies information concerning state and local procedures for financing the public schools in 1953-54, gives details concerning the finance programs in all the states and in seven of the outlying parts of the country. Information is also offered about state funds for schools, formulas for calculating allocations of state funds, and provisions for securing local funds for schools.

It is shown that the rate of increase in federal funds for education while still relatively small, is

more pronounced than for state and local funds. Federal funds for schools are now about 20 per cent over the amount provided 20 years ago. State funds are approaching six times, and the local funds are three times as much as 20 years ago. Local funds, derived from local and district school taxes, it is shown, have decreased from 70 to about 56 per cent of the total revenues for schools in the 20-year period. The shift from local taxes is attributed to difficulties with the general property taxes and the ease with which new state taxes are enacted, collected, and distributed. The change also insures more equalization of the tax burden and a more acceptable foundation program for each of the states.

Color for Schools

By John L. Reid. 6 pp., 10 cents. American Institute of Architects, Washington 6, D. C.

Adds to the established principles of school interior painting the idea of using limited areas color to improve a confused pattern of unrelated elements in rooms.

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The Superintendency in New Jersey

Prepared by a committee of the New Jersey Federation of District Boards and the New Jersey Co-operative Program in Administration. Paper, 25 pp., 50 cents. Published by the State Federation of District Boards of Education, 306 East State St., Trenton, N. J.

This booklet provides a check list to presidents of boards of education in offering solutions to problems in educational administration. While the study was confined to one state, the research technique and conclusions should prove of interest and help to school boards and administrators throughout the country.

Program of Requirements for

Elementary School, Poland, Ohio. Compiled by John H. Herrick. Paper, 12 pp. Bureau of Educational Research, College of Education, Ohio State University, Columbus, Ohio.

A guide for the preparation of drawings and specifications for a proposed new elementary school. It sets up requirements, including (1) pupils to be housed, (2) the layout of the site, (3) general arrangement of interior, (4) design of the building, (5) provision for expansion, and (6) estimate of cost. The building will include 12 classrooms, administrative rooms, auditorium-gymnasium, cafeteria-music room, library, teachers' rest rooms, and custodial and engineering rooms.

Annual Financial and Statistical Report

of New York City Schools. Compiled by Charles Gilman, administrator of Business Affairs. Paper, 119 pp. New York City board of education, 110 Livingston St., Brooklyn 1, N. Y.

This 1954 report of the Division of Business Affairs is divided into three parts: (1) financial and physical schedules and comparative tables; (2) physical data of property; (3) financial data of each property. The report shows that the total disbursements for all activities amounted to \$301,174,253.55. Current expenses from funds administered by the board were \$252,738,113.41. The total cost of operation of the school plant was reported as \$20,202,159.16.

A Building Study for Cranston's Children

Prepared by Center for Field Studies, Harvard Graduate School of Education, Cambridge 38, Mass.

Recommendations for the improvement of the Cranston, Mass., school plant, an evaluation of the present school buildings, an analysis of the school age population, and financial implications of the proposed new construction. The recommendations propose additional facilities on the secondary level and additions, new construction, and abandonments for elementary and junior high schools. It is suggested that a complete six-year junior-senior high school be erected to accommodate 1500 pupils.

Substitute Teachers in the Schools,

1953-54. Paper, 55 pp. Bulletin for February, 1955. Research Division, National Education Association, 1201 Sixteenth St., N.W., Washington 6, D.C.

A study which sought to discover and validate some of the ways in which substitute teachers may work effectively with regular teachers. It includes material on personal traits of teachers, their working relationships with other teachers, and policies and administrative practices affecting substitute teaching. Suggestions are made for improving substitute teaching service in order to insure a better and more important job.

Compendium of

State Government Finances in 1954. U. S. Department of Commerce. Paper, 72 pp., 40 cents. U. S. Government Printing Office, Washington, D.C.

Forty tables illustrating the position of the finances of state governments during the year 1954.

Standard Form of Questionnaire

for the Selection of Architects. Prepared by the National Council on Schoolhouse Construction. 4 pp. Published by the Council, W. D. McClurkin, Secretary Peabody College, Nashville 9, Tenn.

This is a working sheet prepared by the board of education and their executives who are engaged in hiring architects for planning new school buildings. The form is intended to bring out the ability of an architect and his organization to render efficient

service. Experience, integrity, and understanding of school planning problems are considered of equal importance.

Budget Explanation

for 1955-1956. Paper, 32 pp., Board of Education, Oneonta Central School, Oneonta, N.Y.

An unusual "budget workbook" that utilizes tables, graphs, and detailed explanations to reduce all budget facts to the simplest terms. Greatly aids the taxpayer in understanding the budget problems.

Statistics of City School Systems

Staff, Pupils, and Finances 1951-52. Paper, 137 pp., 45 cents. U. S. Office of Education, Washington, D.C. Chapter 3 of the *Biennial Survey of Education*, 1950-52.

School Plant Programming

School Plant Studies, BT 1-17. By Charles R. Colbert. Paper, 4 pp. American Institute of Architects, Washington, D.C.

Outlines procedure in school plant programming.

Costs Per Pupil in Ohio County School

Districts, 1953-1954. Compiled by W. R. Flesher and P. W. Howells. Paper, 15 pp. Bureau of Educational Research, College of Education, Ohio State University, Columbus, Ohio.

The grand total payment per pupil was \$237.94 in 1953-54. The total current expenses for that year amounted to \$210.60, while the capital outlay was estimated at \$74.41.

Blueprint for Expansion in

Rockville, Md. Ten Years of Building Schools. Compiled by Forbes H. Norris, Supt. Paper, 20 pp. Board of Education of Montgomery County (Rockville) Md.

This brochure depicts the progress made in ten years of building schools in Montgomery County from 1945 to 1955. It discusses the financing of the county schools, the preparation of the building program, the planning of plant facilities, planning for economy, construction costs, maintenance, housekeeping, and transportation. A magnificent achievement.



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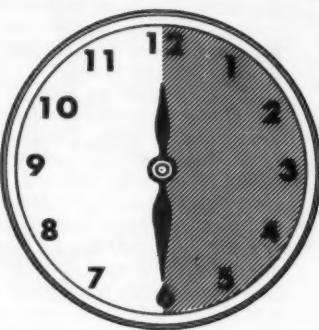
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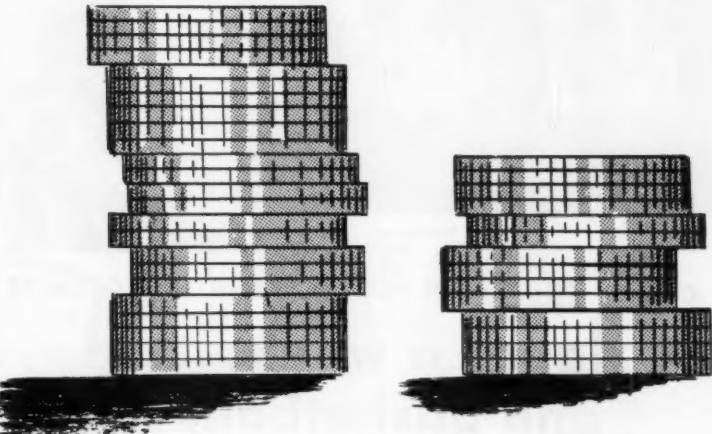
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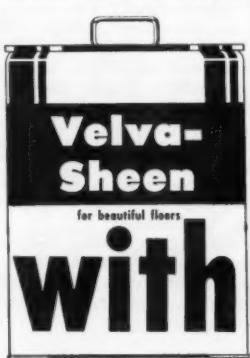
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MAJESTIC WAX COMPANY
Denver, Colorado



HOW OREGON BUILDS SCHOOLS

(Continued from page 43)

rooms and classroom wardrobes are ventilated mechanically or by gravity on about a 50-50 basis. Gravity ventilation through pivoting sashes serves most classroom areas. Oregon is known for its natural air conditioning; therefore, to the writer's knowledge no school in Oregon has air-conditioning equipment. Several schools have mechanical ventilation throughout, but they are definitely in the minority.

Artificial Lighting

Incandescent lighting is still tremen-

dously popular for school illumination. Concentric-ring fixtures are very much in fixtures are used where relighting is necessary to bring the foot-candles to state evidence in the majority of new classrooms. A myriad of incandescent fixtures are used in other sections of buildings. Fluorescent standards and where electrical circuits are inadequate to carry the load required for incandescent lighting. Fluorescent fixtures light about 14 per cent of the new classrooms constructed in 1954. This is an increase over 1953. The most popular fluorescent fixtures are those that have a translucent plastic reflector below the tubes causing the major portion of the light to be reflected from the ceiling. The quality

of artificial light in the new school classrooms is excellent.

Room Details

Floor coverings for classrooms and corridors still lean heavily to asphalt tile, with vinyl tile and linoleum in use as coverings in a few buildings. Ceramic tile is used frequently in toilet and shower rooms. Hardened concrete is commonly used in toilets, dressing rooms, and showers in buildings where districts had to make the most of limited funds.

Plywood, plaster, and hardboard were the most common wall materials in classrooms and corridors. Fir plywood paneling is durable and adds beauty to any classroom, if properly finished. Many of the special areas, such as toilets and dressing and shower rooms have walls finished in ceramic tile, lime block, glazed tile, and other processed materials that are serviceable and easily maintained. Ninety per cent of the new classrooms constructed in 1954 have acoustical tile ceilings. There was complete agreement among the school districts in that all installed green chalkboard.

The classrooms that were constructed in 1954 averaged 900 square feet of free area, exclusive of all built-ins, except those of work counter height. The majority of classrooms have storage facilities, sinks, and work counters that are desired by most classroom teachers.

Oregon has kept pace with its school building needs the past year. Will it do as well in 1955?



Walter Horst, Superintendent
Three Rivers, Michigan

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SCHOOL BUILDING NEWS

★ Milwaukee, Wis. The school board's building committee has approved preliminary plans for three new elementary school buildings, to cost a total of \$3,000,000. The largest project is the Center-Pierce School, to cost \$2,000,000.

★ Rustburg, Va. The need for additional classroom facilities has been critical for some time and six building projects are being held up awaiting funds to become available. Requests have been made for loans amounting to \$896,000 for new school construction.

★ Sprague, Wash. The board of trustees of the school district has completed the erection of an elementary school costing a total of \$175,000. The building includes four classrooms, a kindergarten, music and multi-purpose rooms, a kitchen, and a principal's office.

★ Tacoma, Wash. The new Baker Junior High School, under construction for the past year, was completed in August.

★ Approximately \$2,000,000 is being spent for five new schools and additions, as well as alterations of present schools, in the Gate City, Va., schools.

★ Two identical elementary schools are now being built in Omak, Wash. At a cost of \$195,000 for each unit, the buildings have eight classrooms, a clinic, office and multi-purpose room apiece.

MILLION-DOLLAR PROGRAM

Approximately 11.4 million dollars worth of new schools have been opened this year in 27 Nebraskan cities and towns. The largest projects are schools at Lincoln, Grand Island, and Hastings. A 40-classroom senior high school has been erected at Grand Island, at a cost of \$2,725,000.



Has that man gotten
lazy? All he does is sit
and watch the gauges.

The more he sits on his chair, the better I like it. It means the steam pressure is where it should be and everything is fine and dandy.



He used to be
jumping around like a
monkey on a hot stove.

That was before we got wise and changed
our coal.



What kind of coal
are we using now?

It's a high quality, low ash coal produced on the Chesapeake and Ohio. The C&O coal man recommended the exact grade best suited to our type of furnace. It burns hot and clean, with practically no smoke or clinkers and very few ashes. I've learned there's a lot more to buying coal than merely the price per million BTU's. It takes a competent combustion engineer to weigh all the factors and pick the coal that will give the most economical operation under a given set of conditions. Those C&O people really know their coals and I'm listening to their advice from now on.



There's a lot more to buying coal than the cost per ton. For facts and figures to solve your particular fuel requirements, write to: R. C. Riedinger, General Coal Traffic Manager, Chesapeake & Ohio Railway Company, Terminal Tower, Cleveland 1, Ohio.

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BRANCH PLANT AT NAHMA, MICHIGAN

CANADIAN-AMERICAN WORKSHOP

An experiment in international relations at the level of public school administration has recently been completed at the summer session of Syracuse University, Syracuse, N. Y.

The Canadian-American Workshop, which proved quite successful, was conducted as a part of the University summer session from July 18 to July 29, 1955, on the University campus.

The purpose was to bring together Canadians and Americans who are concerned with school administration in order to examine problems of common interest and concern and to discover by exchange of views what contributions each might make to the other.

The problems having the greatest appeal included a study of the St. Lawrence Seaway Development, educational progress, and cultural co-operation between the two countries over the next 25 years.

Approximately 25 educators from the provinces of Ontario, Quebec, and New Brunswick, together with educators from "south of the border," were in attendance during the two weeks' session. Dr. Virgil M. Rogers directed the workshop.

SEGREGATION IN DALLAS

The Dallas, Tex., school board has promised to make periodic reports to the people on its progress in desegregating the Dallas schools. President Edwin Rippy warned in stern language that the board would not be stampeded into action by pressure groups. He said the problem in Dallas is a serious one and that it is being carefully studied to avoid any pitfalls. Certain minority pressure groups have tried to sow seeds of discontent among the people, both colored and white.

The board is giving close study to probable abolition of segregation in a few schools where white and Negro families are living in mixed districts. Dallas is expected to be the next city to complete the abolition of segregation. This is one of the cities where Negroes are in the majority, but comparatively few Negroes live in western Texas.

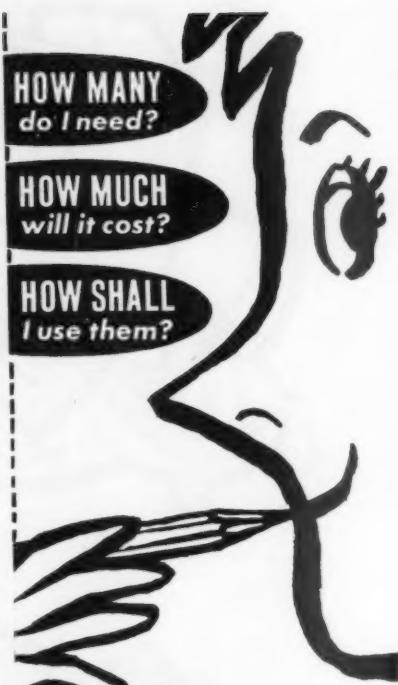
DROP RACE DISCRIMINATION

A federal judge, Judge Wilson Warlick, in a suit brought against the McDowell County, N. C., board of education, has ruled that the construction of a school specifically for Negro students is illegal. The ruling seems unlikely to affect school building plans generally in North Carolina. John Cameron, Director of Schoolhouse Planning for the State Board, pointed out that the board has eliminated designation of school building projects as "white" or "Negro."

★ At Hoxie, Ark., school opened for the first time with Negroes and whites attending the same classes. No special attention is being paid to Negro students and it is the intention to treat all children alike.

★ The Cecil County school board at Elkton, Md., has committed itself to use every effort to comply with the Supreme Court's decision on segregation and to follow the recommendations of the State Board of Education. The Cecil group is the first eastern shore board to pledge its active support of an integration system.

★ A 3-judge federal court in Columbia, S. C., has ordered the Summerton school district trustees to proceed with all deliberate speed to operate on a nonsegregated basis. The trustees have been enjoined from refusing on account of race, to admit any child to any school, from and after such time as they have made the necessary arrangements for ending segregation. Attorneys for the trustees and for the Negro parents who brought the suit, agreed to general lines of the decree.



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Sandusky, Ohio New York



SCHOOL BOARD JOURNAL for SEPTEMBER, 1955

LEWIS AND CLARK

(Concluded from page 48)

age room, and adequate space at entrances.

When all bills were paid, it was found that the building has cost the district the sum of \$121,851, including architectural but excluding equipment.

After a year of operation the building has proved to be satisfactory in every respect. The combination multipurpose room-corridor has presented no difficulties. It serves very well as a means of getting to and from classrooms and its use for other purposes does not interfere with classroom activity. It was not intended that it would ever be used by the general public while school was in session.

CLASSROOM LIGHTING

(Concluded from page 50)

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6. California Council of Architects, "Sampling School Planning in California," 1948.

7. Campbell, Rev. P. E.; et al., *Schoolhouse Planning and Construction*, Joseph F. Wagner, Inc., London, 1950.

8. Carpenter, W. W., *School House Planning and Construction*, State Department of Education, Missouri, Publication No. 5, 1946.

9. Department of Audio-Visual Instruction, *Planning Schools for Use of Audio-Visual Materials*—No. 1, "Classrooms," National Education Association, July, 1952.

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11. Harmon, D. B., "Are We Confusing 'Eyes' with 'Vision?'" *Illuminating Engineering*, April, 1953.

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13. Lukiesch, Matthew, *Light, Vision and Seeing*, D. Van Nostrand and Co., Inc., N. Y., 1944.

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15. Metropolitan School Study Council, *Designing the Elementary School in Harmony with the Emerging Design of Education*, N. Y., 1951.

16. Moon, P., and Spencer, D. E., "Relative Illumination Needed for Tasks of Varying Difficulty," *Journal of the Optical Society of America*, Vol. 34, October, 1944.

17. Research Committee of the Sight Conservation Council of No. Calif., *Recommended Practices for Lighting California Schools*, 1943.

COMING CONVENTIONS

Sept. 18-20. *Michigan Association of School Administrators*, at Park Place Hotel, Traverse City, Mich. Secretary: A. J. Phillips, P.O. 480, Lansing, Mich. No exhibits. 500.

Sept. 26-28. *Council of School Superintendents of New York*, Saranac Inn, Saranac Inn, New York. Secretary: E. L. Ackley, Mamaroneck, N. Y. 650 expected attendance.

Oct. 16-20. *Association of School Business Officials*, at Sherman Hotel, Chicago, Ill. Secretary: Harley W. Anderson, 703 Kalamazoo Bldg., Kalamazoo, Mich. 1000.

Oct. 20. *Indiana City & Town Superintendents Association*, Indianapolis, Ind. Secretary: Everett Light, Rushville, Ind. 500.

Sept. 20-24. *National Council on Schoolhouse Construction*, Jung Hotel, New Orleans, La. Secretary: W. D. McClurkin, Peabody College, Nashville, Tenn.



UNIQUE Weldwood Chalkboard attracts magnets, doubling as bulletin board and visual aid board. Weldwood Aluminum Chalkboard Trim is easy to apply, low in cost. Rochambeau School, White Plains, N. Y. Inst. Kallek, Inc., New York City; Arch. Shirley & DeShaw.

New kind of chalkboard is easy on young eyes, easy on school budgets



BUILT-IN lockers of beautiful Weldwood natural birch encourage neatness and order. South School, New Canaan, Conn. Architect: Sherwood, Mills and Smith.

And it's guaranteed for the life of the school!

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WORK-STUDY CONFERENCES

(Concluded from page 8)

On Thursday, Friday, and Saturday, September 29, 30, and October 1, the National School Boards Association, Inc., will sponsor its "Nationwide Symposium to Explore New Approaches to the Problems of Public Education," at the New Pickwick Hotel, Kansas City, Mo.

In attendance, by invitation, there will be about 125 school board leaders from all 48 states and from the board of directors and staff of the N.S.B.A.; some 50 members of the educational profession from national, state, local and institutional levels; and a score of other persons from various organizations and agencies, including the 9 speakers who will provide background for the discussions.

The speakers are being drawn from a number of areas of American life which have been involved in periods of rapid expansion and/or in critical problems of personnel, materials, and finance. At present writing (July 30) it appears that these areas will include architecture, education, engineering, man-power supply, medicine, the military, psychiatry, the stock exchange, and television. Top level people in each of these areas will be secured to describe the practices and outcomes of experience. For example, Dr. J. E. Hinsey, head of the Cornell University Medical Center in New York City, will represent the field of medicine.

The plan for the Symposium is, first, to have the background presentations made

as rapidly and concretely as possible. Then the total body of participants will be divided into nine discussion groups, each having assigned a chairman, a recorder, and an approximately equal number of discussants. Each group will be charged with the special responsibility of analyzing one of the basic presentations with a view to drawing from it all possible ideas that might be applied to the public school situation. When they have done this to their satisfaction, whatever time remains may be given to a general discussion of ideas gleaned from any of the other eight presentations.

A group of 10 observers will serve during the Symposium — one chief observer and one assigned to each discussion group. Their function will be to watch for high lights in the discussions, for new and outstanding ideas, for suggestions that seem particularly significant. The group observers will report to the chief observer after each discussion session. It will be the chief observer's responsibility to put together from all the ideas that are brought to him a report to a final general session of the Symposium. This report should enable all participants to leave Kansas City with immediate knowledge of the major accomplishments of the Symposium. After the meeting reports of the background presentations, and of the conclusions and recommendations of the discussion groups will be developed in printed form for wider distribution.

Several other features will mark the Symposium. Special effort will be made to utilize all means of communication — the

press, radio, and television — to publicize the meeting and its findings, and to establish understanding relationships among the educational profession, the school boards of the nation, and the American people particularly through their organizations.

SCHOOL BOARD AGREEMENT

(Concluded from page 33)

the highest possible level. As representatives of the people and the culture, you will be a living demonstration for school employees and students of the idealism on which democracy, education, and religion depend.

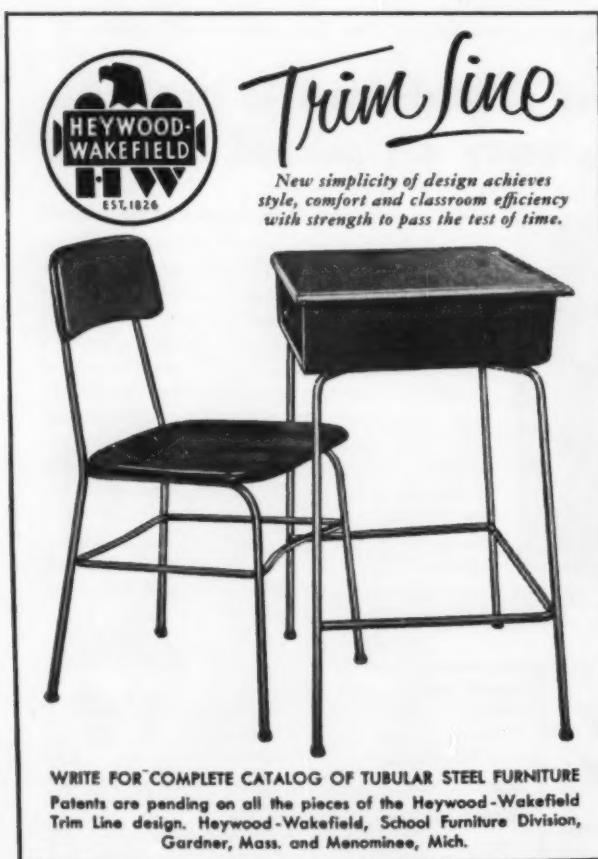
This paper is not a finished product. There may be many omissions. After use, each of you may be able to submit notes that in rewriting would make a more effective guide for others.

INDUSTRY TEACHERS

(Concluded from page 38)

frequently expressed. This served to confirm the view of the Education-Cooperation committee that, once exposed to the people in education, management would find them stimulating as individuals and eager as professionals to do a good job, both as a part of the workshop itself and for their students in school.

The real dividends will come later in better oriented and adjusted employees who understand more about the business of making a living and who, as citizens, will be more capable of making a livelihood.



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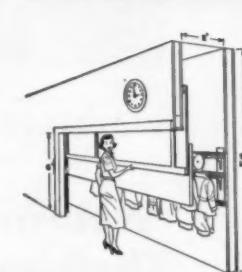
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New simplicity of design achieves style, comfort and classroom efficiency with strength to pass the test of time.

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WARDROBE BEHIND CHALKBOARD is reached by easy upward movement of 2-section Barber COLMAN WARDROBE door. Full-view opening gives teacher control of "cloakroom rush." Provides more working wall space for chalkboard or tackboard, more usable floor space clear of pivots and hinges. Advertised to school officials. Call your Barber-Colman distributor...under "Doors" in phone book.

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24 YEARS AGO

First Schieber installation, Oliver Wendell Holmes School, Detroit, Mich. Still in good condition and in daily use 24 years later.

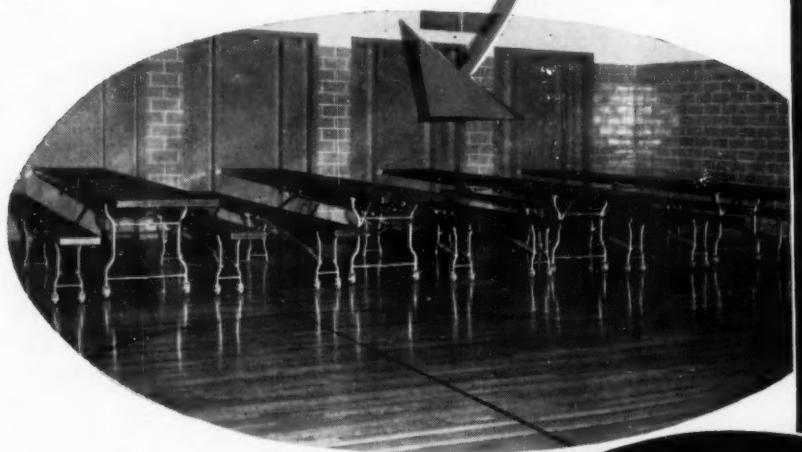
To withstand the punishment of daily school use year after year a product must be "built like a battleship." Active juniors put it to the real test. Schieber experience and engineering is your protection and their equipment has been the architects' choice in thousands of installations.

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TODAY

Schieber In-Wall Installation
Daniel Webster School, Gary, Ind.
ARCHITECTS: Beine Hall & Curran, Inc.,
Gary, Indiana



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- 7 Tight fitting, bright stainless steel edges.
- 8 Tables and benches may be used separately. No connecting bars or obstructions.

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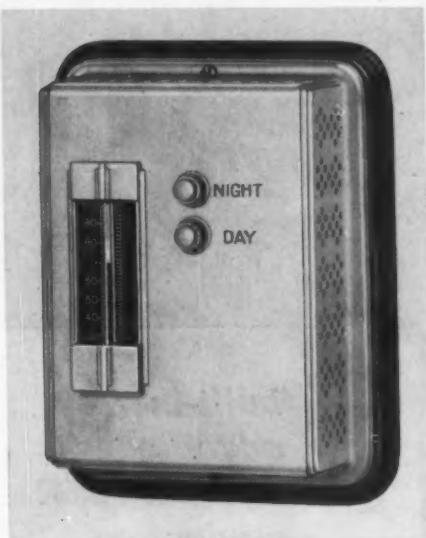
IN-WALL • PORT-A-FOLD • MOBIL-FOLD



News of Products for the Schools

New Johnson Dual Thermostat

To help school districts which are using their schools for community and social centers and evening classes, the Johnson Service Company has now developed the new Johnson T-465 thermostat. This modification of the dual thermostat makes it possible to restore full daytime operation of the unit ventilators for heating and ventilating just those portions of a school building which are being used at night.



Model T-465

Since evening activities usually require the use of only a small portion of the building such as the auditorium, one or two of the classrooms, or the industrial education shop, it is desirable for economy reasons that the unused portion of the building remain on intermittent night operation at a reduced temperature level. In rooms being occupied, the T-465 restores the unit ventilator to its normal daytime function; continuous fan operation with thermostat in control of the unit valve and damper to maintain the daytime temperature and to provide ventilation.

Zoning For Use

Because various parts of a school are sometimes in use at different hours of the day and night, it is common practice to provide two or more dual temperature zones. This "zoning for use" requires a predetermination of which

rooms will be used at the same time so that the control air mains can be properly zoned during construction. Except in the case of special rooms such as auditoriums or gymnasiums, which are certain to be used during evening hours, it is impractical to arrange the dual circuits so that any room can be restored to normal day operation independently of the others.

In buildings where intermittent night operation of the units is not employed, dual thermostats are often furnished with a single push button for restoring the daytime temperature setting while the remainder of the building remains on the night setting. When intermittent night operation is provided, a given room can be maintained at the daytime temperature with positive recirculation of room air but no outdoor air for ventilation will be obtained since the unit ventilator controls are positioned for the night cycle from a central panel. The outdoor air dampers remain closed.

New Model

Since large numbers of people frequently use the school rooms during these evening hours it is essential that outdoor air be used to provide healthful ventilation and continuous air circulation as well as maintaining the regular daytime temperature.

Johnson has now designed a thermostat that can be used with any night intermittent cycle in which the switchover from continuous day to intermittent operation is achieved by a change in supply air pressure. The new Johnson T-465 has the same appearance as the standard T-460 single push button dual thermostat except that it has two push buttons on the cover. It uses a special pipehead with three air connections instead of two. The third connection is the switch line for returning the unit ventilator to full daytime operation. During the day, pushing either of the buttons has no effect, so students cannot tamper with the temperature regulation.

Dual Operation

At night, when the room is to be occupied, the "Day" button is pushed and the unit ventilator is automatically restored to normal day operation while the rest of the units served by the same dual supply line are on night operation. When nighttime occupancy is over, the "Night" button is pushed and the thermostat is indexed back to its night

setting. Should the occupants neglect to push the "Night" button on leaving the room, the thermostat is automatically brought in step with the others when the central dual switch is placed in its "Day" position the following morning. It is necessary to push the "Day" button again the following evening if the room is to be used again.

Use of the new Johnson T-465 dual temperature two push button thermostat in conjunction with intermittent night cycles makes it possible to obtain maximum system flexibility consistent with a practical and simple zoning system. This makes it possible to utilize to the fullest extent all of the many educational and community functions of which a modern school building is capable.

(For Further Details Circle Index Code 0101)

SCREEN IMPROVEMENTS

The Hilo viewing screen, manufactured by Da-Lite Screen Co., Inc., Chicago, is now being manufactured in an entirely new and improved glass-beaded, mildew, and flame-resistant fabric. In addition, every inch of plating on the metal portions of the screen is of durable chrome. The Hilo can be set with ease at high or low positions, and can be used as a wall screen as well. Prices will remain the same.

(For Further Details Circle Index Code 0102)

NEW CHAIR TRUCKS

For quick, easy storage of folding chairs, four new models of demountable chair trucks are being manufactured by the Krueger Metal



KV25 Model

Products Company, Green Bay, Wis. One of the outstanding features of the Krueger chair trucks is their exclusive new "chan-angle" frame. This unusual frame of advanced design permits faster, easier loading with chairs securely positioned into a channel type track which prevents them from "falling through." Lightness of weight for easier mobility is combined with heavy-duty, durable, welded steel construction so that these trucks will withstand the hardest usage. Sturdy swivel and fixed type coasters have 4-inch diameter wheels with roller bearings and rubber tires.

When empty, the "chan-angle" frame also permits each truck to be stacked one upon the other by removing the demountable end arms (and side rails of the Under-stage truck) and positioning the wheel into the side members of the truck below.

(Continued on page 98)



End Hot Water Complaints • Stop Wasting Fuel

due to OVER-heated water

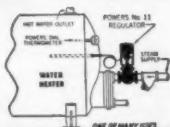
Install Powers No. 11 Self-operated temperature regulators. They prevent OVER-heated water, often pay back their cost 3 to 6 times a year and give years of reliable service.

They are simple to install, dependable, economical. Write for Bulletin 329, prices and full information about this quality regulator. (e16)



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Convert any room
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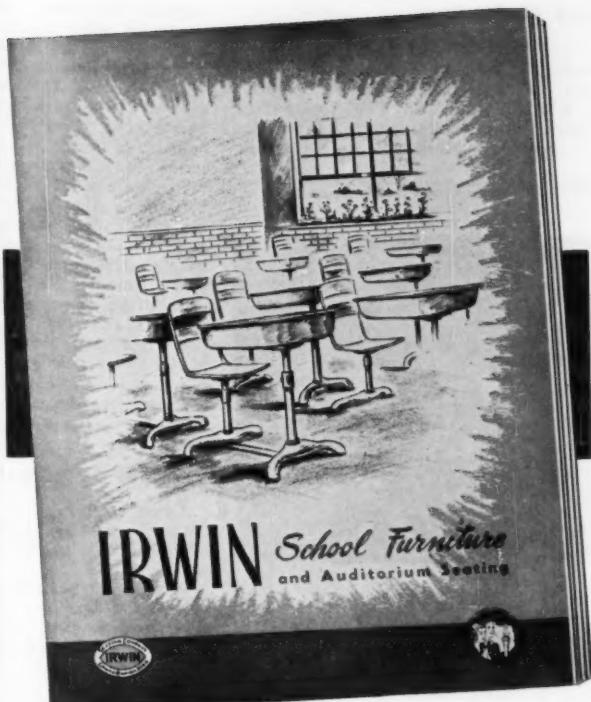
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IRWIN *School Furniture
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solution to your SEATING
PROBLEMS!**

First, write for your free copy of the IRWIN catalog. You'll find it describes a complete range of versatile, practical, exceptionally well made seating for all classroom and auditorium requirements — at prices that make them very sound values.

Second, consult us on the specific seating problems which may be facing you. Our thoroughly experienced engineering staff will be happy to assist you to the very best possible solution. Why not take the first step, right now, toward making your seating budget do maximum duty, by writing for your free copy of the IRWIN catalog?



News of Products . . .

(Continued from page 96)

Krueger folding chairs are usually stacked vertically on the three standard models: KV25, KV35, and KV50. The Under-stage KH50 model which stacks chairs horizontally has a capacity of 50 y-type or 75 x-type chairs.

(For Further Details Circle Index Code 0103)



Bruswick-Horn

REDESIGNED GYM SEATING

A complete redesigning of Brunswick-Horn folding gym seating has been announced by the Horn Division of the Brunswick-Balke-Collender Company, Chicago.

The new design improvements include more comfort, ease of operation, and improved locking for greater safety. Great structural strength is also an important feature of the new folding gym seating. The entire under-

structure is of metal, with all support columns made of steel tubing (instead of angles, shapes, or bends) for maximum strength.

Rises can now be furnished in two heights — 9 inches and 11½ inches. The new design also allows Brunswick-Horn to furnish 24-inch spacing from back to back of seats in addition to the 22-inch spacing previously provided. Seats are 18-inch "chair height" for maximum comfort. Skirtboards slope back under the seatboards to allow spectators to move their feet and legs freely and remain seated while people pass in front of them.

The opening and closing of Brunswick-Horn gym seating has been made easier and smoother with the use of simplified and more positive lock and elimination of the necessity of tilting the seatboards. More of the assembly of the seating is being done, now, in the company's factory to provide easier, faster, and more economical installation.

(For Further Details Circle Index Code 0104)

CHALKBOARD LIGHTING

A new lighting fixture designed especially to illuminate chalkboards has been announced by Sylvania Electric Products, Inc., New York, N. Y.

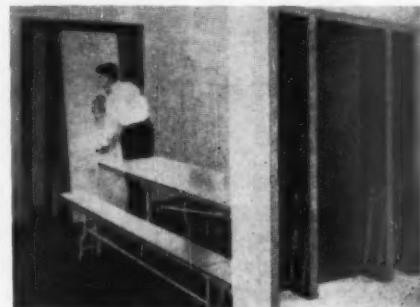
The new chalkboard fixture provides abundant light over the entire writing surface eliminating shadows and glare on the writing surface. The new fixtures are useful, also, wherever vertical surfaces require supplementary light.

The chalkboard fixture line is available in 4-, 8-, and 16-foot lengths in rapid and instant start. Knock-out plugs provide for continuous row mounting. All painted parts are zinc-phosphate Bonderite treated after fabrication to prevent deterioration.

(For Further Details Circle Index Code 0105)

CONSERVES WALL SPACE

Port-A-Fold folding tables and benches, manufactured by Schieber Sales Company, Detroit 39, Mich., are now available in double-depth pockets. Two tables and four benches may be stored in the same wall area that is regularly required for one set. This design was developed for buildings lacking wall space for conventional Schieber equipment, or wishing to use the wall space for other purposes. The Port-A-Fold tables and



Double-Depth Unit

benches in this new double-depth unit are all detachable and may be rolled to any position and the tables and benches are not connected to each other so that the tables may be used separately with banquet chairs if desired.

Depth of the pocket is 14 inches, double that of conventional Port-A-Fold pockets. Provisions can be made to have the pockets recessed in the wall only halfway, with rounded corners on the protruding half.

(For Further Details Circle Index Code 0106)

NEW TABLE DESKS

Two newly designed table desks for use by the individual student have been introduced by the Arlington Seating Company, Chicago. These new Individual Table Desks have exclusive forward-of-center slanting post design that gives students more leg freedom, minimizes chair movement, and allows easy entrance and departure. Other features include: solid hardwood tops, large book compartments, adjustable-tension slam control friction disk hinges (on lift-top model), projection-free underneath surfaces.

Models No. 841, stationary-top, and No. 851, lift-top, are available in four heights, with or without inkwells and pencil trays. Arlington also manufactures matching chairs.

(For Further Details Circle Index Code 0107)

FLOOR PROTECTION

Cem-Seal, a new one-coat product developed by Hillyard Chemical Co., St. Joseph, Mo., forms a seal on concrete surfaces to prevent deposits of alkaline salts. Application of Cem-Seal to a new concrete floor eliminates surface powdering during the curing process, holds moisture in the concrete to prolong the process to best length of time, and results in a denser, harder surface. A new floor treated with the product can be opened to traffic in four hours, and used during the curing process. It will be protected from stains and discoloration.

Cem-Seal is also an effective primer or renewing agent for old concrete floors. It ends surface powdering, eliminates acid etching, and provides a firm, tight base for floor finishes; a floor treated with the product cleans easily.

(For Further Details Circle Index Code 0108)

(Continued on page 100)

the NEW KEYSTONE Overhead Projector

Classroom teachers have pronounced it
"the best all-around teaching projector we've ever seen . . . brighter, cooler and quieter, smaller and lighter."

Refined optical system; two-way cooling. It Projects Everything— standard slides, 2-inch slides, strip film, micro-slides—and perfect for Tachistoscopic Techniques. Write for new Circular.

KEYSTONE VIEW CO., Meadville, Pa.
Since 1892—Producers of Superior Visual Aids.

QUESTION: Is School Administration a Cooperative Job?

ANSWER:

So long as public schools are owned and controlled by the communities in which they are located, school administration will be the concern of the citizen-elected school board members and their appointed administrators and officials.

Paid Circulation

Members of boards of education	13,965
Superintendents of schools.....	7,706
Assistant superintendents.....	141
Business managers, purchasing agents, superintendents of building and grounds.....	274
Schoolhouse architects and consulting engineers.....	1,012
Colleges, universities and normal schools	726
Others, including principals, private schools, school supply dealers, miscellaneous.....	949
 Total Circulation, June 30, 1955.....	 24,773
Renewal of subscriptions.....	90.45%

That is why since 1891 THE AMERICAN SCHOOL BOARD JOURNAL has published a monthly magazine for *all* people in the top levels of school administration, both members of boards of education and professional school administrators.

The result of this unwavering policy is that today, as during more than 25 years, the JOURNAL has more paid subscribers in school administration than any publication in the field — an all-time high of 24,773.

And a greater percentage of these subscribers renew their subscriptions annually than any similar periodical read by top school people.

The Editors and Publisher thank the JOURNAL subscribers for their magnificent vote of confidence!

THE AMERICAN
School Board Journal



HOME MAKING LABORATORY AND ART ROOM FURNITURE

For more than sixty years Peterson furniture has set the pace for style and design. Peterson engineers and leading educators, studying together the requirements of school furniture under actual working conditions, have built into each piece of equipment a quality and workability that has made Peterson the leading choice of educators for many years.

Our representative will gladly assist in any problem you may have . . . or if you prefer, write on your letterhead for our illustrated catalog.

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Direct Prices &
Discounts to
Schools, Churches,
Clubs, Lodges and
All Organizations



Full line of
folding chairs



Above: Transport-
Storage Truck No.
TSC

Right: Transport
Truck No. TF



WRITE FOR BEAUTIFUL
NEW CATALOG, No. 300,
PRICES AND DISCOUNTS

THE MONROE COMPANY
6 CHURCH STREET, COLFAX, IOWA



Transport and store your folding tables and chairs the easy, modern way with Monroe All-Steel Trucks. Each truck is designed to handle either tables or chairs. Construction of Truck No. TSC permits storage in limited space.

Keep coats and hats out in the open, aired, dry and in press—each coat on a wooden hanger held spaced apart from every other; each hat in its individualized space on a ventilated shelf. Save floor space—accommodate 5 people per square foot. Rigidly built for lifetime service—welded heavy gauge and square tubular furniture steel. Beautifully finished baked-on enamel. Portable units come on large swivel casters. Checker Wall Racks are also available in any length by the foot—fit in anywhere. Mount on wall at any height—standard equipment in modern schools, etc. where they keep clothes in a safe, sanitary, orderly manner.

CK-205

VOGEL-PETERSON CO.

"The Checkroom People"

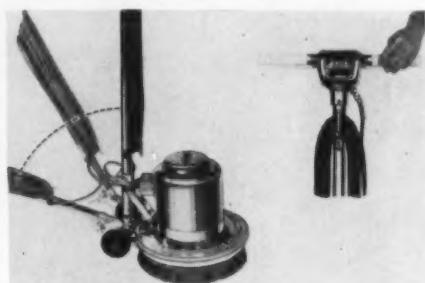
1121 WEST 37TH STREET, CHICAGO 9, U.S.A.

News of Products . . .

(Continued from page 98)

NEW ATTACHMENTS

Huntington Laboratories, Inc., now has available as optional equipment, a double safety switch built into the handle of Models 16 and 16B floor machines. By using this new safety switch, the floor machine operator



Machine Attachments

can operate the machine with either hand. By changing the pressure from one hand to the other, fatigue is eliminated, and operator time is saved.

Also available on Model 16 or 16B floor machines as optional is a new adjustable handle. Adjusting through an arc from zero degrees to 90 degrees, this feature makes it easier to store floor machines, and also compensates for the height of the operator when the machine is in use.

(For Further Details Circle Index Code 0109)

CATALOGS AND BOOKLETS

Illustrated case histories show the practicability of "School Modernization with Owens-Illinois Glass Block" in a booklet by that title, available upon request.

(For Convenience Circle Index Code 0110)

"Please Don't" is the title of a leaflet published by the Maple Flooring Manufacturers Assn., Chicago, explaining to contractor, floor layer, and amateur do-it-yourself builder, precautions in eliminating moisture and expansion from kiln-dried hardwood flooring. Free copies are available upon request.

(For Convenience Circle Index Code 0111)

"Title for Schools," a new 24-page booklet in full color photographs is offered by the American-Olean Tile Company, Lansdale, Pa. The booklet illustrates the many uses of tile, shows how its use reduces maintenance costs, and gives complete descriptions of installations shown.

(For Convenience Circle Index Code 0112)

A manual for daily schedule of washroom maintenance is offered by Huntington Laboratories, Inc., Huntington, Ind. The manual is brief and easy to follow. Free upon request.

(For Convenience Circle Index Code 0113)

Singer Sewing Machine Company, New York, offers a new "Singer Sewing Skills Reference Book," to be used as a sewing textbook. The book offers solutions to common sewing problems, with diagrams and instructions, depicts handling and care of the machine, and each chapter has a lesson page. Although the hard-cover book retails at a higher price, home economics teachers may purchase a copy for \$1.

(For Convenience Circle Index Code 0114)

FURNISH THE FINEST FOR YOUR SCHOOL



ALL-NEW *Classic Model*

Only
CONN Organs
Offer All This

- ★ MORE REALISTIC ORGAN TONE
- ★ TRADITIONAL ORGAN STYLING
- ★ TWO FULL 61-NOTE INDEPENDENT MANUALS
- ★ FULL A.G.O. 32-NOTE PEDAL BOARD
- ★ WIDE RANGE TRUE SOLO "VOICES"
- ★ INSTANT RESPONSE AS DESIRED
- ★ PRICED TO FIT ANY SCHOOL BUDGET

This newest CONN organ is the masterpiece of the industry... far surpassing in tone and musical performance anything previously offered. See your CONN organ dealer for comparative demonstration before buying any organ. No other organ offers your school so much! C. G. Conn Ltd., ORGAN DIVISION, Dept. 931 Elkhart, Indiana



Free BROCHURE
All about this great new CONN CLASSIC organ. Also ask for free booklet, "How to Choose an Organ."

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"TRIUMPH IN TONE"

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New SERIES 70 CHANNEL STEEL CHAIR

Check and compare all these exclusive engineered features

FRAME — Non-tipping Y-type 16-gauge double-beaded channel steel, electrically welded and riveted.

SEAT — Extra large, 14½" x 15", 17" from floor. Steel or wood, contour shaped for full seating comfort.

BACK REST — Correctly postured, curved steel with fully rolled edge.

FEET — Swaged-on steel glides covered with white mar-proof rubber.

LEG BRACES — 3 leg frame stretchers prevent spreading or racking.

HINGES — Fully covered safety type prevent accidental pinching.

SEAT LOCKS — Free operating, positive holding — prevent chair collapsing.

Larger seat
LUXURY

Non-tipping
SAFETY

Longer durable
CHAIR LIFE



IN ADDITION TO THE NEW SERIES 70, Krueger offers a wide range of quality steel folding chair styles in a complete price range to meet every budget requirement.

Write for new catalog showing complete line.

KRUEGER

METAL PRODUCTS • GREEN BAY • WISCONSIN

For Your WIDE Windows



PATENTED

The Draper X-L unit shown above provides for windows of unlimited width



Shades are mounted to a heavy gauge steel shield.



Offset brackets give shades 6" overlap.

THERE IS A DRAPER DARKENING SHADE FOR WINDOWS OF ANY TYPE OR SIZE

X-L — For extremely wide and multiple windows.

PAKFOLD — One set of demountable shades may be moved from room to room.

LITE-LOCK — Roller box and side channel equipment for laboratory in stallations.

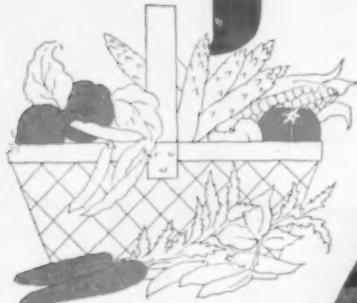
SKYLIGHT — A rugged and efficient unit.

To get Draper Quality...Specify DRAPER

LUTHER O. DRAPER SHADE CO.
P.O. Box 471
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In its dining car service, a railroad cannot afford anything less than the best—a rule followed by all who cater intelligently to the public taste. Witness the thousands of hotels, restaurants, clubs, hospitals and others in the institutional field who serve Sexton foods. Each Sexton canned vegetable is a prize variety, grown where soil and climate combine to produce the peak. Each is scientifically processed to retain its garden-fresh flavor and vitamin content and each can is packed full to the brim.



Western Pacific Railroad, California



JOHN SEXTON & CO., CHICAGO, 1955

Sexton

Quality Foods

READER'S SERVICE SECTION

INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisers and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

Code No.	Page No.	Code No.	Page No.	Code No.	Page No.
90	Adams & Westlake Co. 2nd cover	920	Fenestra Building Products 17		on page 70 for catalog and planning manual.
	Adlake Aluminum Windows. Why Ohio State University uses Adlake Windows in their new residence hall. Free information.		Acoustical structural building panels. Use coupon on page 17 for free literature.	932	Keystone View Company 98
91	American Crayon Company 92	921	Flexicore Company, Inc. 79		Keystone overhead projector. Free new circular.
	Art materials. Send 50¢ for new handbook of art education materials.		Precast concrete floors and roofs. Send coupon on page 79.	933	Krueger Metal Products 101
92	American Clean Tile Company 84	922	Griggs Equipment Company 68		Channel steel chairs. Free new catalog.
	Ceramic tiles. Free new full color ceramic tile booklet.	923	Guth Co., Edwin F. 16	934	Kuehne Manufacturing Co. 63
93	American Optical Co. 71		Gratilite lighting ceilings. Free information.		School furniture. Free illustrated brochure.
	AO school vision screening test. Free information.	924	Heywood-Wakefield Co. 94	935	Libbey-Owens-Ford Glass Co. 12
94	American Playground Device Co. 92		Tubular steel furniture. Free complete catalog.		Daylight Walls. Free book and information on school daylighting.
	Playground equipment. Free catalog and free literature.	925	Hillyard Chemical Company ins. betw. 84 & 87	936	Ludman Corporation 4
95	American Seating Company 26		Floor treatment materials. Free floor treatment survey.		Auto-lok windows. Use coupon on page 4 for free information.
	Desks and auditorium chairs. Free literature.	926	Hunt Pen Co., C. Howard 104	937	Luria Engineering Corp. 8
96	Barber-Colman Company 94		Boston pencil sharpeners. Free report.		Standardized steel building frames. Free catalog.
	Barcol WARDROBEdoor. Free information.	927	Huntington Laboratories, Inc. 90	938	Majestic Wax Company 89
97	Beckley-Cardy Company 19		Seal-O-San gym floor finish. Free information.		Velva-Sheen floor products. Free information.
	SlateSteel chalkboard. Free sample and complete details.	928	International Business Machines Corp. 89	939	Maple Flooring Manufacturers Assn. 20
98	Butler Manufacturing Company 25		IBM electric typewriters. Free information.		Hard maple flooring. Free specifications and data.
	Steel buildings. Use coupon on page 25 for free information.	929	Irwin Seating Company 97	940	Medart Products, Inc., Fred 3rd cover
99	Celotex Co., The 10		Classroom and auditorium seating. Free Irwin catalog.		Gym apparatus. Free catalog.
	Acousti-Celotex sound conditioning. Use coupon on page 10 for free literature.	930	Johnson Service Company 2	941	Minneapolis-Honeywell Regulator Co. 6 & 7
910	Chesapeake and Ohio Railway.... 91		Temperature controls. Free information.		Schoolmaster temperature and ventilation system. Free information.
	Coal. Free information on fuel requirements.	931	Keweenaw Mfg. Company 70	942	Mississippi Glass Company 21
911	Chicago Hardware Foundry Co. 78		Laboratory equipment. Use coupon		Translucent and clear glass. Free catalog "Better daylighting for schools."
	Sani-Dri electric dryers. Free literature.				
912	Clarin Manufacturing Co. 14 & 15				
	Folding chairs. Free four-color catalog.				
913	Combustioner Division, Steel Products Eng. Co. 18				
	Combustioner coal stokers. Free folder "Buncombe County Story."				
914	Conn Band Instrument (Div. C. G. Conn) 88				
	Band instruments. Use coupon on page 88 for new Conn catalog.				
915	Conn Organs (Div. C. G. Conn) ... 101				
	Organs. Free brochure and booklet.				
916	Cyclone Fence, American Steel & Wire Div. 24				
	Steel fences. Use coupon page 24 for free literature.				
917	Ditto, Incorporated 72 & 73				
	Ditto duplicators. Use coupon on page 73 for free literature and information.				
918	Draper Shade Company, Luther O. 101				
	Window shades. Free information.				
919	Farley & Loetscher Mfg. Co. 78				
	Farlite plastic laminates. Free descriptive folder.				

(Continued on next page)

TEAR ALONG PERFORATED LINE. POSTAGE PAID FOR CONVENIENCE.

THE AMERICAN SCHOOL BOARD JOURNAL

400 North Broadway, Milwaukee 1, Wis.

September, 1955

Please ask the manufacturers, whose code numbers I have encircled, to send me free information, catalogs or product literature as mentioned in this issue of the JOURNAL.

ADVERTISING INDEX

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NEWS OF PRODUCTS FOR THE SCHOOLS

0101	0103	0105	0106	0107	0108	0109	0110	0111	0112	0113	0114
0102	0104										

Also information on

Name _____ Please Print _____

Title _____ School _____

City _____ Zone _____ State _____

Index to School Equipment—continued

Code No.	Page No.	Code No.	Page No.	Code No.	Page No.
943	97	958	1		
Mitchell Mfg. Company		Sloan Valve Company			
Fold-O-Leg tables. Free specification folder.		Flush valves and shower heads. Free descriptive folder.			
944	100	959	83		
Monroe Company, The		South Bend Lathe Works			
Folding tables and chairs, and trucks. New free catalog.		Lathes and power equipment. Free printed teaching helps and film loans.			
945	65	960	76		
Mutschler Brothers Co.		Structural Slate Co.			
Factory built cabinets. Free information.		Natural slate blackboards. Free information.			
946	74	961	80		
National School Equipment Co.		Taylor Company, Halsey W.			
Sit-rite desks. Free information.		Drinking fountains. Free information.			
947	4th cover	962	22 & 23		
Nesbitt, Inc., John J.		Trane Company			
Unit Ventilators. Free publication 284.		KB unit ventilators. Free information.			
948	11	963	24		
Owens Illinois: Kimble Glass Co. Sub.		United States Steel Corp. (Cyclone Fence)			
Solar selecting glass block. Free technical bulletin.		Steel fences. Use coupon on page 24 for free literature.			
949	100	964	82		
Peterson & Co., Leonard		Unit Structures, Inc.			
Home making laboratory and art room furniture. Free catalog.		Laminated wood members. Free complete catalog.			
950	97	965	93		
Powers Regulator Co.		U. S. Plywood Corp.			
Temperature controls. Free bulletin.		Weldwood chalkboard. Use coupon on page 93 for free folder.			
951	101	966	81		
Premier Engraving Company		Universal Bleacher Company			
Halftone and line engraving.		Rol-A-Way stands. Free catalog.			
952	75	967	100		
Royal Typewriter Company, Inc.		Vogel-Peterson Co., Inc.			
Royal electric typewriters. Use coupon on page 75 for free literature.		Checker hat and coat racks. Free information.			
953	95	968	9		
Schieber Sales Company		Wakefield Company, The			
In-Wall multiple purpose room equipment. Free catalog.		Photo-metrics lighting units. Free booklet.			
954	102	969	13		
Sexton & Company, Inc., John		Warren Webster & Co., Inc.			
Institutional foods.		True-perimeter heating. Free information.			
955	66 & 67	970	87		
Shwayder Brothers, Inc.		Weber Costello Company			
Samsonite school furniture. Free new catalog.		Lite-site chalkboard and alphasite chalk. Free brochure.			
956	64				
Sico Mfg. Co., Inc.					
L-B folding table. Free catalog.					
957	77				
Sjostrom Co., John E.					
Multi-level library desk. Free information.					

For Your Product Information Request

The advertisements in this issue have been given a code number for your convenience in requesting information on products, services, booklets, and catalogs offered. Encircle the code number of the advertisement in which you are interested, clip and mail the "postage paid" card. Your request will receive prompt attention. BRUCE — MILWAUKEE.

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AMERICAN SCHOOL BOARD JOURNAL

P.O. Box No. 2068

MILWAUKEE 1, WISCONSIN



tops in class

BOSTON KS

efficient—30 hard-steel, deep-milled cutting edges cut swiftly and neatly—BOSTON pencil stop prevents waste

rugged—strong, die-cast frame and steel rack—nickel-plated steel receptacle

adaptable—snap guide takes 8 pencil sizes

dependable—guaranteed 1 year—even against classroom wear and tear



specify BOSTON KS



BOSTON
PENCIL SHARPENERS

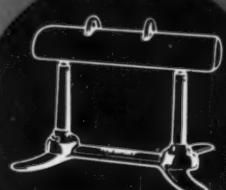
FREE!

School report book on pencil sharpener care, selection and use in schools.

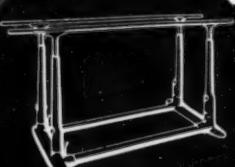
C. HOWARD HUNT PEN CO.

Also mfrs. of SPEEDBALL pens and products

Finest GYM APPARATUS Anywhere!



Side Horse



Parallel
Bars



Pond - Medart
Twisting Belt



Medart

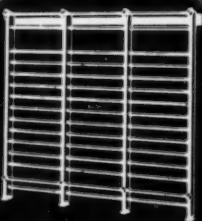
The Standard by which all other gym apparatus is
judged—preferred above all others.



Flying
Rings



Springboard



Stall Bars



Pulley
Weights

MEDART'S LINE OF GYM APPARATUS IS COMPLETE

- Climbing Poles & Ladders
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- Rowing Machines
- Pulley Weights
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- Anthropometric Equipment
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FRED MEDART PRODUCTS, INC. • 2578 DEKALB ST. • ST. LOUIS 18, MO.

Write For
Catalog



'Not as a stranger,' comes the Nesbitt man—with the skill and the will for friendly service . . .

The important part that **NESBITT SERVICE** plays in your **CLASSROOM COMFORT**

All over America are John J. Nesbitt and American Blower representatives who believe in faithful service as the sure road to your satisfaction



Before YOU BUY... the Nesbitt man discusses your needs, explains the principles and operation of controlled ventilation, and presents abundant proof of the greater thermal comfort and allover economy of the Nesbitt system—furnishing, as well, every needed technical assistance.



When YOU BUY... the Nesbitt man "lives with the job"—expedites delivery, offers installation advice, inspects, checks, assures the perfect final adjustment. He also coaches the teaching and maintenance staffs on the function of Nesbitt equipment and provides and explains the literature on proper care and use.*



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*Publication 261-M for the custodian; Publication 284 for the teaching staff.

The spirit of service has identified the Nesbitt company for 43 years. If you are a stranger to this service, or have immediate need of a representative, write to John J. Nesbitt, Inc., Philadelphia 36, Pa.

**YOUR BUY-WORD
FOR LONG-LASTING
SERVICE IS**

Nesbitt

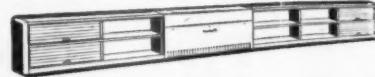
SCHOOLROOM HEATING AND VENTILATING EQUIPMENT



Nesbitt Syncretizer



Wind-o-line Radiation



The Nesbitt Package



Sill-line Radiation



Sill-line with Cabinets



Deluxe Cabinet Heater

NESBITT SERVICE is available from all these offices of John J. Nesbitt, Inc., and American Blower Corp.

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